

5th Edition of
Global Conference on

Surgery **and Anaesthesia**

05-07 SEPTEMBER | *Madrid, Spain*

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ABSTRACTS**

Keynote Speakers



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Founder, OrthoNOW® Immediate Orthopedic Care Centers Upper Limb Surgeon, Badia Hand to Shoulder Center, United States



Brandon Lucke Wold

University of Florida, United States



Darwin Eton

Vasogenesis Inc., United States



Fabrizio Bonanno

Polokwane Mankweng Hospitals Complex, Italy



Harry John Visser

SSM DePaul Health Center, United States



Ramesh Kumar Aggarwal

Adesh Medical College and Hospital, India



Reda El Bayoumy

Basildon University NHS Hospital, United Kingdom



Sagar Jawale

Jawale Hospital, India



Theresa P Chiang

Canada China Child Health Foundation, Canada

*Thank You
All...*

Speakers



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Sohag University, Egypt



Ahmed Khairy Sakr
Alazhar University, Egypt



Alex C Pantelides
University Hospital Bristol and
Weston, United Kingdom



Andriy Fedorenko
Ziv Medical Centre, Israel



Gaurav Vishal
Prathima Cancer Institute, India



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Thank You
All...

Welcome Message



Darwin Eton M.D., F.A.C.S., D.F.S.V.S.

Chief Medical and Science Officer

Vasogenesis Inc

Boston, MA USA

Welcome to the 2024 Global Conference on Surgery and Anesthesia in Madrid Spain. Your attendance highlights your commitment to accelerating the evolution of health care globally. The Magnus Group continues to gain international acclaim as a facilitator for the exchange of ideas from the frontiers of innovation. The hybrid nature of this conference encourages in-person and electronic exchange of ideas before, during and after the event. The success of this meeting is dependent on the diverse perspectives each of us may offer to each other. By bridging the diversity of our cultures and experiences, this global conference is a powerful catalyst for innovation.

Welcome Message



Dr. Theresa P Chiang


President, Canada China Child Health Foundation, Canada

Dear participants of GCSA 2024. It is a pleasure for me to welcome you to the Global Conference on Surgery and Anaesthesia in Madrid. This conference brings together specialists from different fields and various viewpoints, interested in the areas of advances in surgery and anesthesia. In a world of rapidly changing new technology, allowing fast interaction with patients and technical investigations, it is the responsibility of all of us to uncover and evaluate the advances in these areas.

We will do our best to organize your presentations into sections appropriate to your field of research, so that you can discuss your work with other researchers in the same field.

Situated in the city of Madrid. GCSA will stimulate scientific exchange between the participants by the lively atmosphere of this exciting city. Being an Organizing Committee Member I look forward to meeting you in Madrid.

ABOUT MAGNUS GROUP




Magnus Group, a distinguished scientific event organizer, has been at the forefront of fostering knowledge exchange and collaboration since its inception in 2015. With a steadfast commitment to the ethos of Share, receive, grow, Magnus Group has successfully organized over 200 conferences spanning diverse fields, including Healthcare, Medical, Pharmaceuticals, Chemistry, Nursing, Agriculture and Plant Sciences.

The core philosophy of Magnus Group revolves around creating dynamic platforms that facilitate the exchange of cutting-edge research, insights and innovations within the global scientific community. By bringing together experts, scholars and professionals from various disciplines, Magnus Group cultivates an environment conducive to intellectual discourse, networking and interdisciplinary collaboration.

Magnus Group's unwavering dedication to organizing impactful scientific events has positioned it as a key player in the global scientific community. By adhering to the motto of Share, receive, grow, Magnus Group continues to contribute significantly to the advancement of knowledge and the development of innovative solutions in various scientific domains.

ABOUT GCSA 2024



The **5th Edition of the Global Conference on Surgery and Anaesthesia (GCSA 2024)** will be held from **September 05-07, 2024**, as a hybrid event, with options to attend in person in **Madrid, Spain**, or virtually from anywhere in the world. Focusing on the theme, “*Surgical Innovations Addressing Healthcare Challenges: A Focus on Technology*,” the conference will highlight the latest advancements in surgery and anaesthesia.

This event will gather surgeons, healthcare professionals, anaesthesiologists, researchers, and industry leaders to explore topics like innovative treatments, AI in surgery, surgical robotics, and 3D printing. Keynote addresses, Oral, poster presentations and panel discussions, will provide valuable insights into how these technologies are transforming patient care and improving surgical precision.

Participants of GCSA 2024 will have abundant opportunities for professional growth and networking. Attendees will gain access to the latest research, cutting-edge technologies, and innovative practices in surgery and anaesthesia. The conference will serve as a platform for exchanging ideas with leading experts, engaging in collaborative discussions, and contributing to the future of healthcare.

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KEYNOTE FORUM

Revolutionizing outpatient care: The rise of specialty centers in post-pandemic healthcare

In the wake of the global pandemic, healthcare systems worldwide have faced unprecedented challenges, prompting a reevaluation of traditional care delivery models. As the focus shifts towards enhancing outpatient care, the emergence of all-in-one specialty centers, exemplified by OrthoNOW and the adjacent Surgery Center at Doral, offer a compelling solution. This representative clinical center also includes full imaging options as well as the offices of several subspecialist orthopedic surgeons who provide the expertise at the aforementioned facilities. These centers integrate walk-in facilities with surgical, imaging and rehabilitation services, streamlining patient pathways and optimizing outcomes. Perhaps most importantly, this all inclusive clinical center can be and has been, easily replicated, thus impacting the greater healthcare system.

This presentation delves into the transformative impact of specialty centers on outpatient care delivery, offering valuable insights for healthcare professionals across disciplines. Attendees will gain a comprehensive understanding of how this innovative model can be leveraged to improve patient care, operational efficiency and cost-effectiveness.

By exploring the success of OrthoNOW and similar initiatives, attendees will learn practical strategies for implementing similar approaches within their own healthcare practices. From orthopedics to ophthalmology, the principles underlying these specialty centers are applicable across various medical specialties, empowering attendees to tailor the concepts to their specific areas of expertise.

Moreover, this presentation addresses the broader implications of specialty centers in healthcare reform. By decentralizing services from traditional hospital settings, these centers alleviate strain on emergency departments while enhancing accessibility and affordability for patients. Attendees will discover how this shift towards specialized outpatient care aligns with overarching goals of healthcare reform, offering a roadmap for sustainable and patient-centric healthcare delivery.

Furthermore, this presentation highlights the potential for interdisciplinary collaboration within specialty centers, fostering a holistic approach to patient care. Attendees will explore opportunities for synergy between primary care physicians and subspecialists, maximizing diagnostic accuracy and treatment efficacy.

For healthcare professionals, this presentation offers actionable insights that can enhance their practice in several ways:

- 1. Improving Patient Outcomes:** By adopting the specialty center model, attendees can streamline care pathways, leading to faster diagnoses, superior clinical outcomes and enhanced patient satisfaction.
- 2. Enhancing Operational Efficiency:** Attendees will learn strategies for optimizing resource utilization and reducing unnecessary testing, ultimately improving workflow efficiency and reducing healthcare costs.



Alejandro Badia MD, FACS

Founder, Badia Hand to Shoulder Center and Founder, OrthoNOW, Miami, Florida, USA

Biography

Dr. Alejandro Badia is a hand and upper limb orthopedic surgeon practicing in Miami and New York City. He founded OrthoNOW®, a network of orthopedic walk-in centers and authored the book, "Healthcare from the Trenches" during the lockdown of 2020.

3. **Informing Teaching and Research:** The principles discussed offer valuable insights for educators and researchers, providing a foundation for exploring innovative approaches to healthcare delivery and clinical practice.
4. **Facilitating Interdisciplinary Collaboration:** By fostering collaboration between primary care providers and subspecialists, attendees can enhance care coordination and optimize treatment plans, ultimately improving patient outcomes and satisfaction.

The post-pandemic era presents a unique opportunity to reimagine healthcare delivery, with a focus on enhancing outpatient care through specialty centers. By leveraging the insights and strategies presented, attendees can drive meaningful change within their practices, ultimately contributing to a more efficient, accessible and patient-centric healthcare system.

Emerging therapies of hemangioblastoma

Hemangioblastoma are benign, vascularized cranial tumors caused by autosomal dominant inherited von Hippel-Lindau disease or can appear sporadically. This review will investigate current and emerging treatments for cerebral tumors. It will focus on the current and more importantly, developing hemangioblastoma treatments. Surgical resectioning and radiotherapy are effective treatment options for cerebral tumors, whereas chemotherapies are not commonly used due to their limited ability to penetrate the blood-brain barrier. Recent chemotherapies have shown promise, but further research is needed to determine the efficacy as a treatment for hemangioblastomas. New advances in brachytherapy and immunotherapy are considered promising treatment options for hemangioblastoma. This review aims to offer valuable insights into the latest developments in hemangioblastoma treatments.



Brandon Lucke Wold

University of Florida,
United States

Biography

Brandon Lucke-Wold was born and raised in Colorado Springs, CO. He graduated magna cum laude with a BS in Neuroscience and distinction in

honors from Baylor University. He completed his MD/PhD, Master's in Clinical and Translational Research and the Global Health Track at West Virginia University School of Medicine. His research focus was on traumatic brain injury, neurosurgical simulation and stroke. At West Virginia University, he also served as a health coach for the Diabetes Prevention and Management program in Morgantown and Charleston, WV, which significantly improved health outcomes for participants. In addition to his research and public health projects, he is a co-founder of the biotechnology company Wright-Wold Scientific, the pharmaceutical company CTE cure and was a science advocate on Capitol Hill through the Washington Fellow's program. He has also served as president of the WVU chapters for the American Association of Pharmaceutical Scientists, Neurosurgery Interest group and Erlenmeyer Initiative Entrepreneur group. In addition, he has served as vice president for the graduate student neuroscience interest group, Nu Rho Psi Honor Society and medical students for global health. He was an active member of the Gold Humanism Honor Society and Alpha Omega Alpha Honor Society. He is currently a member of the UF House Staff Council and Positive Culture Committee. He is married to Noelle Lucke-Wold and has two children. As a family, they enjoy running with their dogs, rock climbing and traveling. In his spare time, Brandon frequently runs half marathons and 10ks together with his wife. Brandon also enjoys reading and discussing philosophy and playing chess. He is currently a Pgy4 neurosurgery resident at University of Florida with R25 funding and plans to pursue endovascular training.

Neutrophils, arteriogenesis and fibrinolysis in chronic limb threatening ischemia

Activated neutrophils have been reported to release pro-angiogenic Hepatocyte Growth Factor (HGF), VEGF-A, MMP-9, angiopoietin 1 and CXCL-8. They also secrete proteases that degrade fibrin. Is there a role for neutrophils in promoting Neovascularization (NV) in Chronic Limb-Threatening Ischemia (CLTI)? Filgrastim induced neutrophilia occurred during our study of a novel NV strategy. Filgrastim is a Granulocyte Colony Stimulating Factor FDA approved for stem cell mobilization. Filgrastim was used to increase the circulating number of pro-angiogenic progenitor cells (CD34+, VEGFR2+) typically deficient in CLTI. It's primary indication though is to treat neutropenia following cytotoxic chemotherapy. While our study antedated knowledge of pro-angiogenic neutrophils, the proteomic data were sufficient to provide the first assessment of neutrophilia in CLTI.

Pre-amputation "no-option" CLTI patients at two independent institutions (N=14) were treated with Filgrastim 8-10 mcg/kg subcutaneously every 72 hours for up to a month. An infra-geniculate Programmed Compression Pump (PCP) was worn for 3 hours daily to increase endothelial shear stress (to initiate arteriogenesis), as well as to deliver oxygenated nutritive blood flow, clear toxic metabolic by-products, disseminate ischemic molecular signals and help deliver salutary progenitor cells back to the activated endothelium.

Blood was drawn one day after the 5th and 10th Filgrastim doses. Comparisons were made to blood drawn prior to the first dose. The expected significant ($p < 0.001$) elevation in the circulating number of progenitor cells was measured by cytometry. The expected increase in neutrophils (6 fold, $p < 0.001$) was measured by cell blood count. The plasma concentrations of Fibrin Degradation Products and of Plasmin, measured by ELISA, were increased >5 fold and >10 fold respectively ($p < 0.01$). The serum concentrations of NV proteins (HGF, VEGF-A, MMP-9, PDGF, angiopoietin1 and others), also measured by ELISA, were significantly increased ($p < 0.05$).

These findings did not occur in patients treated with PCP alone (N=19), in whom blood was drawn on Day 1 and day 30. However, increases in PECAM-1, MCP-1 and serum nitrite were consistent with endothelial activation.

In our evolving "no-option" CLTI experience, PCP use is continued until wounds heal or amputation. Improvement in blood flow was documented by arterial hemodynamic assessment and angiographic evidence of corkscrew collateral growth, segmental arterial recanalization and accelerated contrast transit.

Safe sustained physiologic fibrinolyses, coupled with generation of a pro-angiogenic environment, were temporally associated with a month of neutrophilia. This potent combination may accelerate NV in the race against ischemic necrosis.



Darwin Eton

Vasogenesis Inc.,
United States

Biography

Dr. Darwin Eton is a Distinguished Fellow of the Society of Vascular Surgery. He graduated from the Massachusetts Institute of Technology (B.Sc, MSc.) in 1978 and New York University Medical School (M.D.) in 1982. He initiated this project in 1999 at University of Miami where he was Professor and Chief of Vascular Surgery. He continued the clinical work as Professor of Surgery at the University of Chicago. This project won the Cures Within Reach Award in 2016. The proceeds were used to fund a confirmatory study at University of Illinois at Chicago, where Dr. Eton had a Voluntary Professor appointment in Surgery. He started Vasogenesis Inc (Boston MA), where he presently serves as the Chief Research and Medical Officer. He has authored 45 peer review publications, book chapters and books in Vascular Surgery and has been an invited speaker in USA and internationally.

Assessment & management of hemorrhagic shock and exsanguinations: Approach, tactics, strategies, titrated-to-response anesthesia

The “revised physiological classification” is the only classification that optimizes timely intervention of source control of hemorrhagic shock, and suits tactics such as titrated hypotensive resuscitation and iatrogenic vasoconstriction, and strategies such as titrated-to-response anesthesia and damage control surgery, all actions mandatory for survival to be timely applied when indicated. In any case, any hypotensive progressing or critical shock with imminent or impending cardiac arrest, direct source control via laparotomy/thoracotomy, with concomitant or soon following venous and diastolic refilling, are the two essential initial life-saving steps. This is accomplishable rapidly and efficiently only by a direct ingress for source control, which is a crush laparotomy if the bleeding is coming from an abdominal +/-lower limb site, and rapid sternotomy/anterolateral thoracotomy if the bleeding is coming from a chest +/-upper limbs site. When cardiac arrest by exsanguination has occurred, the core of the physiological issue remains the rapid restoration of a sufficient venous return, allowing the heart to pump it back into systemic circulation either by open massage via sternotomy or anterolateral thoracotomy, or spontaneously after aortic clamping in the chest or in the abdomen. Extracorporeal resuscitation and induced hypothermia are used as the last ditch under sternotomy for direct vision and final war plan. Without first stopping the bleeding and refilling the heart, any resuscitation of advanced progressive HS is an exercise doomed to failure.

Audience Take Away Notes

- Assessment & Management of Hemorrhagic Shock. Tactics and Strategies. Titrated-to-Response Anesthesia. Perspectives on cardiac arrest by exsanguination outcome.



Dr. F G Bonanno

Polokwane Provincial Hospital
Dept of Surgery, Polokwane,
Limpopo, South Africa

Biography

Dr. F Bonanno, graduated in Bologna and Specialist in Emergency Surgery Bologna University 1993, worked in the UK, East Africa, Italy and South Africa.

Peroneal tendinopathy and progressive pedal adductovarus deformity

Peroneal tendinopathies represent a significant challenge in foot and ankle surgery, necessitating a nuanced understanding of their complex etiology and optimal management strategies. This presentation delves into the multifaceted aspects of peroneal tendinopathies, addressing conditions fostering tendon tears, diagnostic modalities for accurate identification and a comprehensive approach to treatment encompassing conservative and surgical interventions.

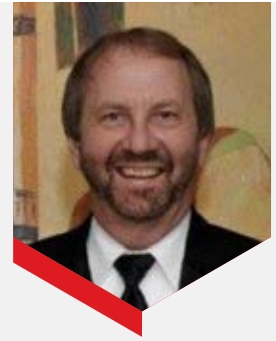
The etiology of peroneal tendinopathies is multifactorial, influenced by various intrinsic and extrinsic factors. Understanding the interplay of these factors is crucial for tailored treatment approaches. Accurate diagnosis is paramount in guiding effective management strategies. Clinical evaluation in addition to diagnostic imaging modalities offer detailed visualization of tendon integrity and associated pathologies, aiding in precise diagnosis and treatment planning.

Conservative management forms the cornerstone of initial treatment for peroneal tendinopathies, however in cases refractory to conservative management or with severe tendon pathology, surgical intervention may be warranted. Surgical approaches vary based on the extent and location of tendon involvement, with the primary goals of repairing tendon tears, addressing associated pathologies and restoring normal biomechanics. Stepwise surgical techniques will be discussed.

Optimal outcomes in the management of peroneal tendinopathies hinge on a comprehensive understanding of their etiology, accurate diagnosis and tailored treatment strategies. A multidisciplinary approach involving foot and ankle surgeons, radiologists, physical therapists and orthotists facilitates comprehensive care delivery. Emphasizing conservative measures as the initial approach while reserving surgical intervention for cases unresponsive to conservative management or with significant tendon pathology. Through integration of these principles, clinicians can effectively address peroneal tendinopathies, mitigate symptoms and optimize functional outcomes for affected patients.

Audience Take Away Notes

- A better understanding of complex etiology of peroneal tendinopathies that exist in foot and ankle surgery
- Conditions promoting tears of the peroneal tendons
- Diagnostic and clinical testing to best identify these pathologies
- Conservative and stepwise surgical approaches to treating identified tears



Dr. Harry John Visser II, DPM, FACFAS

SSM DePaul Health Center, St. Louis, Missouri, United States

Biography

Dr. H. John Visser is one of the Podiatric professions' most decorated physicians. He is an accomplished foot and ankle surgeon from St. Louis, Missouri in practice for forty years. Dr. Visser is a Diplomate of the American Board of Foot and Ankle Surgery as well as a Diplomate of the American Board of Podiatric Medicine. He is a Fellow of the American College of Foot and Ankle Surgeons and has been a residency directory instructing young surgeons in foot and ankle reconstructive surgery training over 100 Podiatric surgeons and he currently has 15 residents under his leadership role.

A comparative study between robotic sleeve gastrectomy & robotic mini gastric bypass-Which one is better?

Bariatric surgery now days is a commonly done procedure for morbid obese or super obese patients. With the development of less invasive procedures like laparoscopy & robotic surgery, the use of bariatric surgery is becoming more common. The present study was conducted with an idea to compare the post operative outcomes in 2 groups (robotic sleeve gastrectomy & robotic mini gastric bypass) in terms of various parameters such as operative time, post-op. pain, length of hospital stay. Present study has been conducted on 35 patients, divided into two groups, based on two commonly performed procedures, Group one-21 patients (Robotic one anastomosis gastric bypass/Mini gastric bypass) and group two-14 patients (Robotic Sleeve Gastrectomy). All the cases in both groups were selected according to the patient's BMI, associated symptoms and patient's own preference for the procedure; both groups were followed for a period of 6 months.

On analysis, group 2 patients had a shorter operating time (P value<0.01) and shorter hospital stay (P value<0.05) with almost similar results in term of weight loss after 6 months. Only one patient in group 1 had significant post operative complication in term of pulmonary embolism that was successfully managed conservatively.

In conclusion, group 2 had a significantly shorter operating time & shorter hospital stay, with almost similar weight reduction after 6 months period of follow up and had no post operative complication, group 1 had one post operatively complications in term of pulmonary embolism which was managed by conservative means.

Audience Take Away Notes

- As obesity is most emerging and lethal disease affecting western as well as asian individuals, this study discuss the comparison about the two most commonly performed procedures
- Audience especially minimal access surgeon can get an idea about two commonly performed procedures and their outcomes, complications and a comparative data which will help them to choose any of two
- As it is a short time study done on the limited admitted patient, but this study and result further can encourage the younger generation to work and research further on this extremely important surgical procedures on a very common emerging global problem



**Ramesh Kumar Aggarwal¹,
Arun Prasad²**

¹Assistant Professor, Department of General Surgery, Adesh Medical College & Hospital, Shahabad, Haryana, India

²Senior Consultant, Department of General & Minimal Access Surgery, Indraprastha Apollo Hospitals, Delhi, India

Biography

Dr. Ramesh Kumar Aggarwal graduated from Sardar Patel Medical College, Bikaner and post graduation in general & minimal access surgery under the guidance of Dr. Arun Prasad (the famous laparoscopic & robotic surgeon) from Indraprastha Apollo Hospital, Delhi, India. He then worked in Government Hospital & Medical College, Delhi and also at Asian Hospital, Fardiabad as associate consultant. At present Dr. Aggarwal is holding a position of Assistant Professor, Department of General Surgery, Adesh Medical College & Hospital, Shahabad, Haryana, India. Dr. Ramesh has received many precious fellowships & life time membership of many prestigious institutes like Association of Surgeons of India & Association of Gastroendoscopic Surgeons of India. He has published many research articles in various reputed journals of national & international level.

A comparison of locoregional versus general anesthesia in patients undergoing carotid endarterectomy: A retrospective single-center study

Objective: Carotid Endarterectomy (CEA) reduces the risk of stroke in patients with asymptomatic and symptomatic extracranial carotid artery stenosis. Modern medical management of extracranial carotid artery stenosis has proven its efficacy and safety; therefore, a low perioperative risk in both anesthesia and surgery is paramount. Outcomes may depend on whether Locoregional Anesthesia (LA) or General Anesthesia (GA) is used. The optimal anesthetic for CEA is controversial. To determine whether the anesthetic method correlated with the outcome of the operation, a retrospective review of 2000 consecutive carotid operations performed over a 10-year period was performed. The aim of our study was to assess the perioperative risks of CEA under locoregional anesthesia compared to those under general anesthesia.

The primary endpoint was the clinical neurological outcome. The secondary endpoint was the mortality rate.

Design: Retrospective analytical study and prospective clinical data bank.

Patients and Methods: The medical records of 2000 consecutive patients who underwent carotid endarterectomy at our institution between June 2013 and June 2023 were prospectively collected and retrospectively reviewed. Operations performed with patients under locoregional anesthesia were compared with those performed with patients under general anesthesia with respect to preoperative risk factors and perioperative complications.

Patients were divided into two groups according to intraoperative anesthetics; locoregional group: 1000 patients versus general anesthetic group: 1000 patients.

Ethical approval was obtained from relevant authorities. The requirement for patient consent was waived owing to the retrospective design of this study.

Inclusion criteria: Patients with a BMI<35 requiring extracranial carotid endarterectomy, which is considered suitable for either locoregional or general anesthesia. All patients with either symptomatic or asymptomatic extracranial carotid artery stenosis for whom surgery is advised were eligible. There were no upper age limits. Patients following thrombolysis were included. None of the patients underwent mechanical thrombectomy before surgery.

CEA was only performed by a consultant vascular surgeon and anesthetist.

The characteristics of the study groups were strictly standardized, including the exact indications for surgery, diagnostic methods,



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Biography

Dr. Reda El Bayoumy has been Consultant Anaesthetist in anaesthetics & intensive care medicine. Lead regional anaesthetics, acute pain management, enhanced recovery programmes (ERP), day-case surgery unit. Lead clinician in pediatrics, obstetrics, thoracic & vascular surgery. Certificate of Eligibility for Specialist Registration in Anaesthetics (CESR) issued by Postgraduate Medical Education and Training Board (PMETB) & Royal College of anaesthetists (RCA) London, the United Kingdom April 2010. European Diploma of Regional Anaesthetics & Pain Management (EDRA) in September 2009. French Diplomas of Specialised Training in Anaesthetics and Intensive Care Medicine. Interuniversity Diploma (French Board) in Paediatric Anaesthetics and Intensive Care in October 2006 Faculty of Medicine, Lille University, France. Specialized Diploma in Anaesthetics & Intensive Care Medicine in November 2005, Faculty of Medicine, Strasbourg

anesthetic techniques, surgical techniques (indications for and the use of intraluminal shunts, heparin dose and patching), intraoperative monitoring, postoperative assessment and antiplatelet therapy. Strict guidelines for anesthetic and surgical management were applied throughout the study.

The following three parameters were measured:

- Incidence of early and late perioperative strokes
- Median length of hospital stay
- Patient Satisfaction Index (PSI)

Confidentiality: All data obtained in this trial is kept and handled in a confidential manner in accordance with applicable laws and regulations.

Results: Perioperative stroke was more common in the GA group (3.5% vs. 0.5%; $P < 0.001$) (Relative risk: Odds Ratio (OR), 1.4; 95% Confidence Interval (CI), 1.214–1.741). Combined death and stroke rates were none in the LA group compared to 0.6% in the GA group ($P < 0.001$). Postoperative episodes of hypertension were more common in the LA group (72.6% vs. 46.4%; $P < 0.001$). Hematomas requiring surgery were more common in the GA group (8.2% vs. 2.1%, $P < 0.001$). The mortality rate was none in the LA group versus 1% in GA group ($P < 0.001$).

Conclusion: CEA can be performed safely and efficiently under locoregional anesthesia. It improves surgical outcomes and leads to better neurological outcomes than general anesthesia.

Risk Factor Analysis Revealed Specific Risk Groups: Men more than women and elderly patient's more than young patients. Asymptomatic extracranial carotid artery stenosis patients had better outcomes than post-stroke patients.

In a retrospective review of a large series of extracranial carotid operations, locoregional anesthesia was shown to be applicable to the vast majority of patients with good clinical outcomes. The versatility and safety of the locoregional anesthetic technique are sufficient for vascular anesthetists and surgeons to include it in the armamentarium of their medical skills.

Keywords: Carotid Endarterectomy, Locoregional Anesthesia, Cervical Plexus Block, Stroke, Transient Ischemic Attacks, Carotid Cross-Clamping, Surgical Intraluminal Shunt, Ischemia-Reperfusion Injury Syndrome, Cerebral Oximeter Monitoring, Near-Infrared Spectroscopy

University, France. Medical Degree Thesis (M.D.) in Cardiothoracic Anaesthetics Faculty of Medicine, Leiden University, Netherlands Faculty of Medicine, Cairo University, Egypt, December 2000. He completed his Master of Science Degree (M.Sc.) in Anaesthetics, May 1993, Faculty of Medicine, Cairo University, Egypt. Medical Bachelor and Bachelor of Chirurgie (M.B.B.Ch.) in December 1993, Faculty of Medicine, Cairo University, Egypt. Currently working as Consultant Anaesthetist in the Mid and South Essex NHS University Hospitals, UK; Honorary lecturer in Anaesthetics and Physiology in Faculty of Medicine, Anglia Ruskin University, UK.

Novel methods and innovations in hypospadias surgery: A surgeon's journey

Introduction: Last 20 years I performed 1978 cases of hypospadias surgeries and made various innovations in the technique of surgery. Most innovations are reported for the first time in medical literature.

Materials and Methods: 1) 718 cases done with continuous interlocking stitches instead of simple and every 5th stitch a knot is taken. They are water tight and knot prevents unwinding of complete suture line. 2) 1568 cases, IV amino acid solution was given which supplies essential amino acids which led to much better healing. 3) Glutaraldehyde Albumin induced laser tissue welding in 318 cases which reinforces skin suture line making it waterproof. 4) 13 hypospadias fistulae closed without surgery by above technique. 5) Methylene blue dye induced laser tissue welding in 58 cases, stopped bleeding which did not with cautery. 6) Urethral pull up operation on 135 cases, free of complications such as fistula, meatal stenosis, meatal regression and residual chordee and one that does not require Dartos flap and suprapubic diversion. 7) Modified urethral pull up operation on 78 cases with urethra pulled through "Glans Tunnel". 8) Appendicular Mucosal Tube Implant with Dartos Wrap Operation in 23 cases of bad quality urethral plate. 9) Extended Urethral Plate Mobilization and reimplantation surgery in proximal hypospadias with severe chordee in 108 cases. Urethral plate lifted, chordee released and proximal mobilization till bulbar urethra. 10) Implanting deli pated full thickness graft from inguinal area in stage 1 cases with bad quality urethral plates in proximal hypospadias. 11) Suprapubic diversion even in distal hypospadias cases as collagen is laid down in 3 weeks. 12) Low dose oral steroids in 38 cases for severe post op pain and in urethral stenosis requiring repetitive dilatations.

Discussion: With techniques described conventionally, success rate could not cross 60%. All above innovations improved success rate from 60 to 99%. Results: Results were much better and statistically significant compared to control group.

Conclusion: We need constant modifications in conventional techniques of hypospadias surgery for better results.

Audience Take Away Notes

- The audience can learn extensively from my experience of hypospadias surgery to improve the success rate from 60% to nearly 99%



Dr. Sagar Jawale

Jawale Hospital, India

Biography

Dr. Sagar Jawale is a pediatric surgeon turned into a scientist. He has more than 100 inventions done till date. He has 40 patents registered in Mumbai office. 25 of his inventions are for the first time in the history of medical sciences. He has developed 15 new operations and 37 new therapies in medicine which are under trial. Most of his research work is unique and reported for the first time in medical literature. His inventions are 20 to 50 times cheaper than peers, a great boon to the mankind. He has invitations from all over the world for the demonstration of his inventions. He has founded Vigyan Yog Foundation a research based no profit organization for distributing his inventions on no profit basis to doctors and medical institutions. What surprises many is his vast range of research which transcends the boundaries of pediatric surgery into almost all dimensions of medical sciences such as biomedical devises, surgery, medicine, psychology, mysticism and yoga.

Importance of dentistry's role in cleft lip/palate management

left lip and palate is a common congenital maxillofacial deformity. There is serious tissue defects with loss of maxillary bone segment and tissue displacement involved, affecting both appearance and function. This deformity causes major challenges because of associated problems, i.e. feeding, conduct disorder, high treatment cost, ear infection, hearing loss, language difficulty. The prevalence of cleft lip/palate is extremely high in N. America, the average being 1/750- 1/1000. Prevalence varies among different countries and even within the same country among different ethnic groups.

With the advancement of science and technology, new surgical techniques and treatments greatly improve the effectiveness of treatment of cleft lip/palate. Current approach to cleft lip and palate treatment is beyond simple surgical repair; these include restoration of physical appearance and function, psychological problem and changes in growth and development. Optimal management utilizing an integrated and collaborative/multidisciplinary approach is particularly important and is almost standard in US and Canada. This collaborative team involves: plastic surgeon, anesthesiologist, pediatric dentist, orthodontist, maxillofacial surgeon, dental surgeon, speech pathologist, audiologist, feeding nurse, pediatrician and otolaryngologist. The dental team involve the following disciplines; pediatric dentist, orthodontist, maxillofacial surgeon and prosthodontist.

Cleft lip and palate sequential treatment approaches different growth stages with different therapeutic targets. Neonatal period pursue physical appearance/functionality; prepubertal period guide dental arch form development and completion of alveolar bone graft; puberty aims at the improvement of function; orthognathic surgery repair takes place following growth and development completion.

With respect to the various dental specialties the following are their roles in the treatment of cleft patients. Maxillofacial surgeon: Performs secondary alveolar bone grafts, combines effort with the orthodontist to correct facial skeletal deformities, augments bone and places implants with the prosthodontist. Prosthodontist: Coordinate with the orthodontist and surgeon during treatment planning, Replace missing teeth, Restore esthetics, Assure longevity of functional dentition. Orthodontist: Works with the pediatric dentist in the mixed dentition, Guidance for the permanent occlusion and maxillofacial complex, Treats the permanent dentition, Develops the plan for orthognathic surgery with the oral & maxillofacial surgeon and the prosthodontist. Pediatric Dentist: Serves as Patient plus Parent advocate in Infancy & mixed dentition phase treatment, as a Dentist provide unique perspective of the whole child brings responsibility for preparation of early and overall



Dr. Theresa P Chiang President

Canada China Child Health
Foundation, Vancouver, Canada

Biography

T.P. Chiang holds a BSc, DDS, Doctorate in Dental medicine (Dalhousie University Canada), Master of Science (Epidemiology) Harvard University, Post doctorate studies at the Massachusetts Institute of Technology (MIT) Cambridge Mass, Teaching Fellow in Pediatric Dentistry, Harvard School of Dental Medicine/ Boston Children's Hospital. He is an American pediatric dentistry Fellow. President, Canada China Child Health Foundation. Served as China's consultant in Preventive Dentistry Steering Committee. He is an Associate professor University of British Columbia. Honorary president of China's Nanjing Stomatology hospital, Nanjing Medical University, Honorary professor/consultant of Beijing children's Hospital, Beijing Capital Institute of Pediatrics, Harbin Children's Hospital ;Guangzhou Maternal and Child Health Institute, Guangzhou children's Hospital, Tianjin children's Hospital, Children's Hospital of Dalian, Nanjing Maternal and Child Health hospital, Maternal and Child Health hospital of Wuhan, Suzhou health College. Chongqing Medical University Children's Hospital. He is also the Recipient of the WUSC Lewis Perinbam Award for International Development.

dental treatment plan (with the team); then, its integration and implementation.

This program was initially introduced to China in 1999 through multiple exchange programs with Canada and the US starting at the Guangzhou Children's Hospital. Later this was followed by Harbin Children's hospital, Qinghai Children's Hospital, Beijing Children's Hospital and the Chongqing University Children's Hospital. Up to now there has been an impressive treatment load of over 10,000 children at the Guangzhou maternal & child health center /Children's hospital alone.

With the current high prevalence of cleft lip/palate in the whole world and most of the treatment have only been rendered by short term surgical programs that are not sustainable. It generally only tackles the surgical aspect but does not address the other needs of the patient. The comprehensive program described here can set an example toward achieving more optimal and sustainable results in the treatment of this problem.

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SPEAKERS



Abd-El-Aal Ali Saleem

Faculty of medicine-Sohag University, Egypt

A comparative study of laparoscopic versus laparotomy repair of perforated peptic ulcer. A prospective study

Background: Laparoscopic surgery is still gaining popularity in conditions associated with peritonitis, such as perforated peptic ulcer.

Aim of the work: This study aimed to compare between laparoscopic and laparotomy repair of perforated peptic ulcer regarding intraoperative parameters, postoperative parameters and outcomes.

Patients and methods: This is a prospective study of 50 patients (males and females), of any age with perforated peptic ulcer. Those patients will be divided by random serial number method into two groups: Laparoscopic group and Open (Laparotomy) group. In a period from 15th April 2022 to 15th February 2023. Data related to patients were recorded and subjected to analysis.

Results: Operative time was significantly increased in laparoscopic versus open group ($P=0.0001$). While, first day pain score (VAS), opioid requirements, time of starting oral feeding, length of hospital stay and return to normal activity were highly significantly decreased in laparoscopic repair compared to open repair ($p<0.0001$ for each). Total post-operative complications showed insignificant difference between the studied groups ($P=0.16$), but they were more prevalent between open group (14 patients, 56%) versus laparoscopic group (9 patients, 36%). Good cosmetic results of wounds were more prevalent in laparoscopic group [20 patients (80.00%)] than open group [13 patients (56.52%)], but insignificant, $p=0.17$.

Conclusion: Laparoscopic repair had upper hand over open repair regarding less intraoperative blood loss, less postoperative pain, requiring less postoperative analgesia, early starting oral feeding, less postoperative complications, shorter hospital stay, early return to normal activity and had good cosmetic results of wounds.

Biography

Abdel Aal Ali Salim Mahran, born on October 30, 1964, in Edfa, Sohag, holds a Bachelor of Medicine and Surgery, obtained in the September session of 1988. He further advanced his academic qualifications by earning a Master of General Surgery in April 1996 and a Doctorate of General Surgery in April 2005. Currently, he serves as a Professor of General Surgery at the Faculty of Medicine, Sohag University, where he has been appointed since December 11, 2013. He is based at the Faculty of Medicine, Sohag University, in the Arab Republic of Egypt, with his primary workplace being the Sohag University Hospital, specifically within the Department of General Surgery, Oncology, and Surgical Endoscopy.



Ahmed Khairy Sakr
Alazhar University, Egypt

The delayed severely mangled limb; Salvage versus amputation (Case Study)

Aim: To evaluate the decision taken guided by the Mangled Extremity Severity Score (MESS) in case of severely mangled extremity injuries.

Methods: The (MESS) score is an accurate predictor scoring system that can be applied to mangled extremities which based on 4 parameters: skeletal/soft-tissue injury, limb ischemia, shock and age. Shock and age are rated with a score of 0-2 each, skeletal/soft-tissue injury with a score of 1-4 and limb ischemia with a score of 0-3 (score doubled for ischemia>6 h). Afterwards the scores of the different parameters are summed. The MESS score ranges from 1 to 14. The MESS score greater than or equal to 7 had a 100% predictable value for amputation.

Results: Male patient 18 years old comes to emergency room after road traffic accident with MESS score was 7 (crush injury, fracture distal femur and proximal both bone leg with extensive soft tissue damage and total skin loss (3), shocked and intubated after Severe bleeding and peripheral circulatory collapse (1), severe ischemia after 1hour from accident, Pale and cold foot with absent distal pulsation (3), age (0)). The patient admitted to intensive care unit to correct the haemodynamic condition and the trauma team surgeons decided limb salvage if patient become stable before 6 hours otherwise an amputation is necessary.

The patient became stable and ready for any surgical intervention after 18 hours, but the MESS score became (9) and theoretically the decision is amputation but the surprise was in stationary not worsen local clinical examination and his relatives refuse decision of primary amputation regarding to young age of the patient. A trial for vascular exposure and repair was done with high risk consent for early or late major complications. Arteriogram was done intraoperative which revealed cutoff at distal SFA and tibio-peroneal trunk. Interposition graft of contralateral GSV was done after external fixator placed by orthopedic team. The distal pulsation was successfully regained and complementary fasciotomy was done to avoid compartmental syndrome with application of Vacuum Assisted Closure on fasciotomy site.

Follow up with strict monitoring to avoid ischemic reperfusion injury syndrome through a multidisciplinary team, Patient discharged from ICU to the ward with good muscle perfusion, audible distal pulsations and warm foot. After 45 days of first operation, patient can walk with external fixator which removed after 6 months and he can walk again with mild support, after another 3 months patient can walk without any support, only foot drop was the end results of nerve injury.

Conclusions: Despite the direction of MESS score towards amputation, the clinical condition of the limb played a crucial role to salvage it which requires reviewing some points of debate again.





Dr. Alex Pantelides*, Jad Waheb, Poppy Gibson, James Smith

Trauma and Orthopaedic Department, Bristol Royal Infirmary, Upper Maudlin Street, BS2 8HW

Audit of documentation of skin integrity at ankle fracture site as per boast guidelines

Background: Early recognition of open ankle fractures is crucial for patient outcomes. Documenting skin integrity is vital in managing these fractures, as per the BOAST 2016 ankle fracture guidelines. Several open ankle fractures were missed at our hospital, prompting an audit on documentation rates.

Methods: The audit was conducted at Bristol Royal Infirmary (BRI), United Kingdom. Patients recognised to have open ankle fractures are immediately transferred from the BRI to the neighbouring orthopaedic centre for definitive treatment. Clerking notes from the BRI Emergency Department (ED) were analysed over two months in 2023 to record documentation rates of skin integrity. Awareness was raised through posters in the ED and Trauma and Orthopaedic (T&O) departments, local meetings and a quiz on open fractures with a prize. Documentation rates were reassessed two months post-intervention.

Results: Pre-intervention, 46 patient notes from November-December 2023 were reviewed; 26.1% (12/46) lacked documentation of skin integrity. Fifteen clinicians took the intervention quiz, averaging scores of $68\% \pm 18\%$. They excelled in questions defining open fractures (100%) and clerking scenarios ($85\% \pm 10.2\%$), but were poor in classifying open fractures using the Gustilo-Anderson classification ($43\% \pm 7.3$). Post-intervention, 45 patients were identified from April-May 2024; 21.1% (8/45) lacked documentation of skin integrity, showing a 5% improvement, though not statistically significant ($X^2 = 0.21$, $df = 1$, $p = 0.65$).

Conclusions: Before the intervention, 26.1% of ankle fracture clerkings did not meet BOAST guidelines for documenting skin integrity, potentially contributing to missed open fractures. Post-intervention, documentation improved by 5%, though not statistically significant. Limitations, such as rotating staff, may have affected results. Adding a “tick box” for documenting skin integrity into the clerking proforma is recommended to improve compliance with BOAST guidelines and patient outcomes.

Audience Take Away Notes

- Attendees will understand the critical role of documenting skin integrity in managing open ankle fractures, ensuring they do not miss crucial information that could impact patient outcomes
- Participants will learn effective strategies for raising awareness about the importance of documentation through posters, meetings and interactive quizzes
- The process of conducting an audit and providing feedback is a valuable skill for continuous improvement in clinical practice
- The statistical approach used to measure the impact of interventions provides a model for evaluating other quality improvement initiatives
- The recommendation to add a tick box for documenting skin integrity on clerking proformas offers a practical solution to enhance compliance with guidelines

Biography

Dr. Alex Pantelides is a junior doctor from the U.K. two years out of medical school with a keen interest in Trauma and Orthopaedics. He graduated from the University of Cambridge with a Graduate Entry Medicine degree in 2022, holds an MSc in Neuroscience from Oxford and a 1st Class Honours BSc in Biochemistry from Imperial College London. Alex has co-authored publications in *Elife* and *Neuron*. His extracurriculars include cycling, motorbike trips and rock climbing.



Fedorenko Andriy^{1*}, Dubin Daniel², Lili Hayari^{2,3} & Yulevich Alon^{1,3}

¹Department of Pediatric Surgery, Ziv Medical Center, Safed, Israel

²Department of Pediatric Surgery, Bnai Zion Medical Center, Haifa, Israel

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Laparoscopic repair of congenital diaphragmatic hernia is feasible in peripheral hospital

Background: Laparoscopic repair of congenital diaphragmatic hernias can be done in suitable infants and children with good long-term results. The benefits include a lower risk of infection, less intra-abdominal adhesions and early recovery while being a “scar-less” procedure.

Materials and Methods: Three patients are described: a 9-months-old infant with a late presentation of Bochdalek left diaphragmatic hernia and 2 more patients with Morgagni congenital diaphragmatic hernia, a 1-year-old infant and a 3-year-old toddler.

All procedures were performed in an abdominal approach using 3 and 5 mm ports and a 5 mm 30 degrees camera. Suturing of the diaphragmatic defect was done with unabsorbed materials (Ethibond® 4.0).

Results: All patients recovered quickly and uneventfully, no intra-operative complications were noted and the patients were discharged between the 3rd-6th postoperative day. The follow-up period is now between 4-25 months and so far there is no evidence of recurrence.

Conclusion: Laparoscopic surgery is used more and more in infants and smaller cavities by pediatric surgeons. Laparoscopic repair of congenital diaphragmatic hernias in infants and toddlers can safely be performed in peripheral hospitals by skilled pediatric surgeons with good results.

Our follow-up period is relatively short and because of the relatively common recurrence rate in those patients, 15-40% in different reports, both in laparoscopic and open repair, long-term follow-up is required.

The main objective of this study was to show that minimally invasive procedures in infants and toddlers are feasible in peripheral hospitals.

Biography

Dr. Andriy Fedorenko studied Medicine at Lviv Medical University (LMU) and graduated with honor as MD in 1995, 1995-1997 internship in general surgery in the 1 surgical department of Lviv regional hospital, 1997-1999 clinical internship in LMU, 1999-2002 performed PhD in LMU, 2002-2004 assistant of professor of hospital surgery cathedra LMU, 2004 moved to Israel, 2006-2013 residence in general surgery, 2016-2019 residence in pediatric surgery. He has published 21 research articles in Medical journals.



Andriy Fedorenko

Pediatric surgery Unit, Ziv Medical Center, Safed, 13100, Galilee, Israel

TopClosure® of large abdominal wall defect instead of staged hernia repair as part of damage control laparotomy

Background: Early closure of the open abdomen is a priority after damage control laparotomy to prevent retraction of fascial layers and prevent hernia formation that requires definitive repair at a later stage. This substantially reduces the complications associated with ventral hernia formation for up to a year after initial surgery.

TopClosure® is an innovative method that employs stress-relaxation and mechanical creep for skin stretching. Its use enables the primary closure of large abdominal wall defects and mitigates large ventral hernia formation.

Materials and Methods: A 7-year-old girl presented with severe blast injury. She underwent initial laparotomy in a facility within the conflict zone and was transferred in a state of septic shock to our facility for further care. Her abdominal injuries included liver lacerations, multiple perforations of the transverse colon and ileum and a 8x16cm oblique abdominal wall defect. Further damage control laparotomy was performed with primary suture of the colon and ileum and temporary closure of the abdomen using a Bagota bag. Twelve hours later Negative Pressure Wound Therapy (NPWT) was applied to the abdominal wound after relook laparotomy. Five days later TopClosure® was applied to the lower part of the wound incorporating NPWT to the upper wound.

Results: The patient suffered leak from the colonic suture line and required relaparotomy. TopClosure® abdominal closure was achieved after every laparotomy.

Conclusion: TopClosure® utilizes the viscoelastic properties of the skin achieving full closure of the abdominal wall (including the fascia and skin), eliminating the need for prolonged NPWT, skin graft and delayed ventral hernia repair surgery.

Biography

Dr. Andriy Fedorenko studied Medicine at Lviv Medical University (LMU) and graduated with honor as MD in 1995, 1995-1997 internship in general surgery in the 1 surgical department of Lviv regional hospital, 1997-1999 clinical internship in LMU, 1999-2002 performed PhD in LMU, 2002-2004 assistant of professor of hospital surgery cathedra LMU, 2004 moved to Israel, 2006-2013 residence in general surgery, 2016-2019 residence in pediatric surgery. He has published 21 research articles in Medical journals.



Dr. Gaurav Vishal

Prathima Cancer Institute, India

Neck node status in squamous cell carcinoma of the tongue

Introduction: Squamous cell carcinoma (SCC) of the tongue is one of the most common oral cavity cancers, accounting for 30 to 50% of all oral carcinomas. Carcinoma of the tongue is treated mainly by surgery followed by adjuvant therapy, depending upon the stage (early and advanced) and histopathological characteristics. The purpose of this study was to evaluate the neck node status and surgical management of squamous cell carcinoma of the tongue.

Methodology: 52 histopathologically proven cases of squamous cell carcinoma of the tongue were included in present study. Recurrent cases and prior treatment of tongue cancer by chemotherapy and radiotherapy were excluded. All the patients involved in the study underwent tumor resection with neck dissection. Results: A total of 52 patients were staged as per TNM criteria (AJCC 8th edition). 51.92% patients were pathologically node-negative (pN0). In pathologically node-positive (pN+) patients N2 Category was the highest followed by N1 Category and N3 Category. The percentage of T1, T2, T3 and T4 lesions were 13.46, 48.07, 28.85 and 09.62% respectively. The lymph node positivity was maximum in T4 followed by T3 and T2. Final histopathological stage grouping revealed early stage (stage I and II) disease in 18 patients and advanced stage (stage III and IV) disease in 34 patients. 15, 33 and 4 patients were treated by surgery alone, surgery with postoperative radiotherapy and surgery with postoperative CRT respectively.

Conclusion: This study concluded that 48.07% of the patients were pathologically node-positive (pN+) and nearly 08% of the patients were pathologically node-positive with extranodal extension (pN+/ENE+). Majority of the patients had diagnosed in advanced stage of carcinoma. Histopathology reports demonstrated the most of the patients had well-differentiated squamous cell carcinoma. Stage I and II (Early stage) patients were treated mainly by surgery alone and stage III and IV (advanced stage) patients were treated with combination therapy.

Audience Take Away Notes

- The aim of this presentation is to spread awareness about patterns of neck metastasis
- The risk of nodal metastasis increases in relation to the location of the primary tumor as one progresses from the anterior to the posterior aspect of the upper aerodigestive tract. In general, the T stage usually reflects tumor burden and therefore the risk of nodal metastasis increases with increasing T stage of the primary tumor at any site. Certain histomorphological features of the primary tumor also increase the risk of nodal metastasis
- The aim of this presentation is to spread awareness and knowledge about management of the neck. Tongue cancers are treated primarily by surgery followed by adjuvant therapy, depending upon the stage and histopathological characteristics

Biography

Dr. Gaurav Vishal is an Oral and Maxillofacial Surgeon (M.D.S), Fellowship in Oral Oncology and Reconstructive Surgery. Dr. Gaurav completed M.D.S- Oral and Maxillofacial Surgery from Institute of Dental Sciences, Bareilly, India in 2020 and Fellowship in Oral Oncology and Reconstructive Surgery from Rohilkhand Medical College and hospital, Bareilly, India in 2021. Dr. Gaurav has received the Emerging Oral Onco Surgeon Award by HPP Cancer Hospital & Research Institute, with collaboration of Indian Medical Association, Lucknow, India. Dr. Gaurav has participated in various International conferences as a Speaker and Moderator. Dr. Gaurav is an expert in the field of Head & Neck Oncology, Reconstructive Surgery, Facial Trauma, Maxillofacial Pathology, Tobacco Cessation and Basal Implantology. Dr. Gaurav has several International and National Publications to his credit.



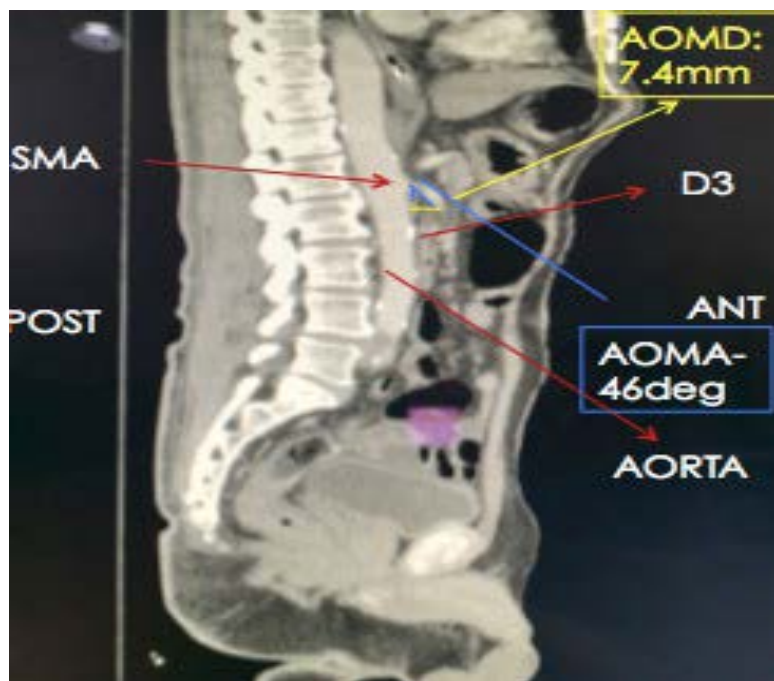
John Felix P. Alicer* MD, Teodulfo H. Barnuevo MD, FPCS, FPSGS

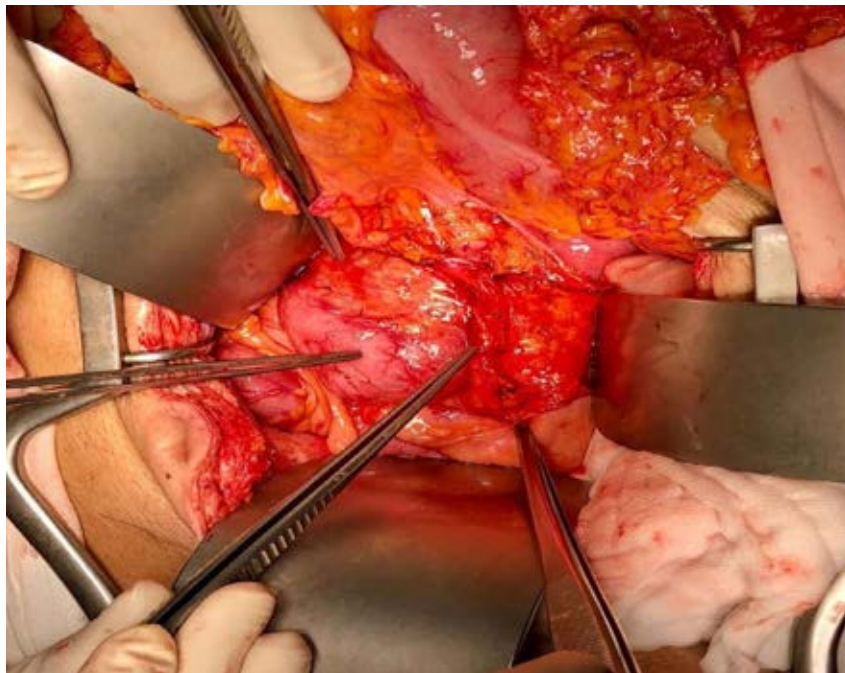
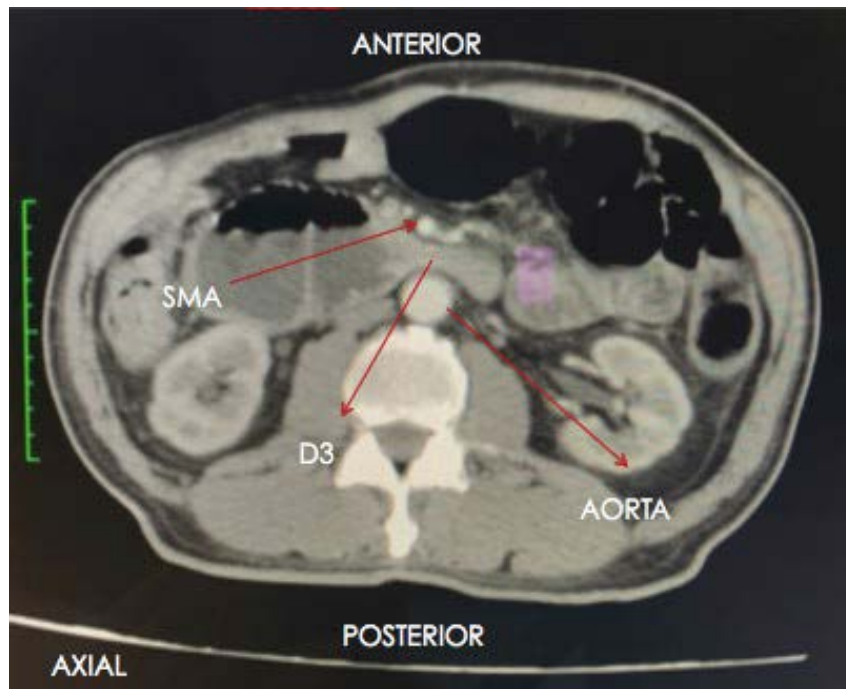
Department of Surgery, Davao Doctors Hospital, Davao City, Philippines

Stuck in the middle: A case of superior mesenteric artery syndrome on a 68 year-old male

Superior Mesenteric Artery (SMA) syndrome, also called Wilkie's syndrome or Cast syndrome, reported to have an incidence of 0.1-0.3% of a population, is a rare disorder in which acute angulation of the SMA causes compression of the third part of the duodenum between the SMA and the aorta, leading to obstruction.

The patient presented in this case is a 68-year-old male who presented with a 1 year history of chronic biliouspost-prandial vomiting, associated with intermittent abdominal pain, weight loss and early satiety. This prompted him to seek consultation where numerous diagnostic procedures were done. All of which were inconclusive of the patient's presenting symptoms. Upper GI Endoscopy revealed Severe Esophagitis, To Consider Partial Intestinal Obstruction. Colonoscopy was then done, only revealing a solitary rectal polyp and Grade I Internal Hemorrhoids. CT Scan of the Whole Abdomen done at another institution was read to be unremarkable save for Atherosclerosis and Sponylosis Deformans. The patient was then managed conservatively and was given due medications to relieve him of his symptoms. Despite medical management, the patients symptoms still persisted and was maintained on soft diet since then, hence the patient decided to seek for consult in our instituion. His previous CT-Scan images were then reviewed in our institution and was read as Upper GI Obstruction likely secondary to Superior Mesentric Artery Syndrome with Inflammatory Changes in the Duodenal Junction at the Level of the Ligament of Treitz. The patient was then advised for nutritional build-up and referred to General Surgery service and was scheduled for Open Duodenojejunostomy.





Intraoperatively, abdominal exploration was done where in no masses were palpated on the small and large intestines, the liver and no peritoneal signs of carcinomatosis were evident. The transverse colon was retracted superiorly to visualize the duodenum. The stomach, 1st and 2nd part of the duodenum were noted to be dilated, while the 3rd part of the duodenum was identified to be compressed by the superior mesenteric artery and the duodenum and was noted to have a smaller diameter in comparison with D1 and D2.

Post-operatively the patient's course in the ward was unremarkable. His diet was progressed slowly. He was maintained on nothing per ore and NGT was kept open to drain with minimal gastric output on post-op day 1-2. He was started on sips of water on post op day 3. On post op day 4, his diet was then progressed to general liquids and was tolerated. On post op day 5, NGT was removed and his diet was progressed to soft diet. The patient was then progressed to full diet and discharged on post-op day 6, with no post-operative complications, no episodes of bilious vomiting, abdominal distention or abdominal pain.

Audience Take Away Notes

- SMA Syndrome or Wilkie's syndrome is a rare case that a general surgeon doesn't see everyday. Through this case report, the author aims to elucidate and shed knowledge on the clinical picture, management and post-operative course of patients with this disease. Additionally, the author further supports the efficiency of surgical correction through a duodenojejunostomy as for SMA Syndrome. In this patient, there was a delay in diagnosis due to its rarity and unremarkable initial work up. Initial medical management was not beneficial to the patient as evidenced by persistence of his symptoms. It was only upon further probing and review of the CT-scan images was the diagnosis clinched and considered. Surgical management was then done by creating a side-side duodenojejunostomy. The intraoperative and post-operative course of the patient was unremarkable. Follow up clinical picture showed no recurrence of symptoms with improved nutrition. In hindsight, it is important for a surgeon to consider such entities in patients with obstructive symptoms with poor response to initiated medical therapy. Through this learning experience, the author hopes to enlighten the surgical community on the importance of high index of suspicion and careful case dissection to arrive on the correct diagnosis and therefore, correct management

Biography

Dr. John Felix P. Alicer, is a senior surgical resident from Davao Doctors Hospital in Davao City, Philippines. He graduated with a Bachelors Degree in Biology from Ateneo De Davao University in 2014. He earned his degree in Doctor of Medicine from Davao Medical School Foundation in 2018 and graduated as Class Valedictorian. He is currently in his 5th year of Surgical Training and is currently the Chief Resident of the Department of General Surgery in Davao Doctor Hospital.



John R. Bach MD

Department of Physical Medicine and Rehabilitation, Rutgers University, Newark, New Jersey, USA

Noninvasive respiratory management of ventilatory pump failure: How and why no one needs a tracheostomy tube for only being too weak to breathe

Introduction: Home mechanical ventilation became possible once electricity became widely available. From 1930 through 1952, Noninvasive Ventilatory Support (NVS) was via negative pressure body ventilators, subsequently it became possible via Tracheostomy (TVS) or up to Continuous Noninvasive Ventilatory Support (CNVS).

Methods: Candidates for definitive noninvasive management of Ventilatory Pump Failure (VPF) have very involved families and absence of severe upper motor neuron disease. Interventions for definitive up to CNVS include NVS via oral, nasal and oronasal interfaces and intermittent abdominal pressure ventilator. These permit extubation and trach tube decannulations of ventilator unweanable (vital capacity as low as 0 ml) patients who satisfy specific criteria. An oximetry, NVS, Mechanical In-Exsufflation (MIE) protocol is used to avoid intubations and for successful extubation and decannulation. NVS settings are about 20 cm H₂O Pressure Support (PS) by bi-level or pressure assist ventilation, by volume targeted bi-level, or preferably by volume preset ventilation over a range of 650 to 1500 ml. This range permits optimal rest, support, lung expansion and tidal volume variation.

Results: In 1993 257 VPF patients were published who left Iron Lungs in 1954 in favor of up to CNVS via mouthpiece^{???} None were known to have died from respiratory causes. Several continue to use mouthpiece CNVS today, now for 70 years. The same center has 20 patients with Spinal Muscular Atrophy type 1 (SMA1), nasal CNVS dependent from as young as 3 months of age, with only trace residual ocular movements, now between 20 and 30 years of age, all with 0 ml of VC. Over 270 consecutive intubated, ventilator unweanable VPF patients, including with SMA1, satisfying specific criteria were extubated and over 100 decannulated of trach tubes, despite having no ventilator free breathing ability.

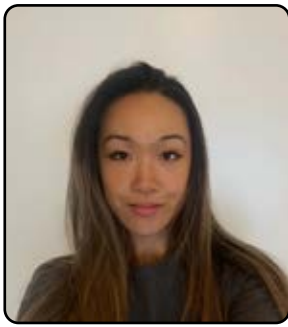
Conclusion: Considering that tracheotomy tubes increase ventilator dependence and hinder weaning, cause morbidity and mortality, enormous expense for nursing care and are not desired by patients who can use NVS and MIE in the community, it became evident that no one needs a trach tube for only being too weak to breathe.

Audience Take Away Notes

- The difference between ventilator failure and lung/airways disease
- How to use Noninvasive Ventilatory Support (NVS) up to continuously and indefinitely
- How to extubate and decannulate ventilator “unweanable” patients
- Why oxygen should never be used instead of NVS and mechanical in-exsufflation for people with only VPF
- This will spare necks from having invasive tubes put through them and can spare enormous sums of money for nursing care

Biography

Dr. John R. Bach is a Professor of Physical Medicine and Rehabilitation and a Professor of Neurology at Rutgers University in New Jersey, USA. He has over 300 peer-reviewed publications and 13 books translated into 4 languages and has lectured on noninvasive management of ventilatory pump failure in over 40 countries. He has directed the Howard Rusk Ventilator Unit and Kessler Institute Ventilator Units and received many awards including the Newark Beth Israel Health Care Foundation Humanism in Medicine Award.



Kelly Ka Yee Chu^{1*}, Kuberan Pushparajah²

¹Cambridge University Hospital, East Anglia NHS Trust, Cambridge, UK; Lister Hospital, East and North Hertfordshire NHS Trust, Stevenage, UK

²Department of Congenital Heart Disease, Evelina London Children's Hospital, London, UK; School of Imaging Sciences & Biomedical Engineering, King's College London, London, UK

Impact of virtual reality imaging on pre-operative planning for paediatric cardio surgery

Objectives: To investigate how virtual reality imaging impacts decision-making in atrioventricular valve surgery.

Methods: This was a single centre retrospective study involving 15 children and adolescents—median age 6 years (range 0.33-16) requiring surgical repair of the atrioventricular valves between 2016-2019. The patients' pre-operative 3D echocardiographic data were used to create 3D visualisation in a VR application. Five paediatric cardiothoracic surgeons completed a questionnaire formulated to compare their surgical decisions regarding the cases after reviewing conventionally presented 2D and 3D echocardiographic images and again after visualisation of 3D echocardiograms using the VR platform. Finally, intraoperative findings were shared with surgeons to confirm assessment of the pathology.

Results: In 67% of cases presented with VR, surgeons reported having “more” or “much more” confidence in their understanding of each patient's pathology and their surgical approach. In all but one case, surgeons were at least as confident after reviewing the VR compared to standard imaging. The case where surgeons reported to be least confident on VR had the worst technical quality of data used. After viewing patient cases on VR, surgeons reported that they would have made minor modifications to surgical approach in 53% and major modifications in 7% of cases.

Conclusion: The main impact of viewing imaging on VR is the improved clarity of the anatomical structures. Surgeons reported that this would have impacted the surgical approach in the majority of cases. Poor quality 3D echocardiographic data was associated with a negative impact of VR visualisation, thus quality assessment of imaging is necessary before projecting in a VR format.

Audience Take Away Notes

- The rapid advancements in virtual and augmented reality technology, driven by the need for it during the COVID-19 pandemic, highlight its extensive applications and potential in medicine
- Developments in virtual and augmented reality technology offer promising roles and potential for advancing medical diagnostics, education and therapies
- However, robust translational research is necessary to identify the areas most in need of these technologies, to assess the feasibility and costs of their integration and to determine if the resulting clinical outcomes surpass those of existing methods
- This study demonstrates the potential clinical benefits and value of virtual reality in surgical planning for congenital heart disease and other structural heart defects
- This study also reveals the crucial and urgent need for more translational research to bridge the gap between technological advancements and clinical practice through collaboration between engineers and doctors to enhance the safety and usability of new modalities

- This presentation aims to emphasise the potential of virtual reality in enhancing surgical treatment and to call the audience to action in driving translational research. This is crucial for mobilizing the integration of growing technology into clinical practice where real and relevant impacts can be made in patient outcomes

Biography

Dr. Chu studied medicine at King's College University, London and graduated with an MBBS in 2023. She also completed an iBSc in Surgical Design, Technology and Innovation at Imperial College London in 2021. She then began her medical career at Lister Hospital, Stevenage, working in rotations of the General Surgery, Stroke and Emergency departments. Additionally, she works in the Plastic Surgery Department at Cambridge University Hospital, Cambridge on an honorary contract. Dr. Chu has presented at the World Congress of Endoscopic Surgery 2021 and has publications in the Journal of Thoracic and Cardiovascular Surgery and the British Medical Journal.



Khadra Galaal

Sultan Qaboos Comprehensive Cancer Care and Research Centre (SQCCRC),
United Kingdom

The surgical management of early-stage cervical cancer

Background: Cervical Cancer (CC) is an important cause of morbidity and mortality in women world-wide. Currently, Radical Hysterectomy (RH) with bilateral pelvic lymphadenectomy is the primary treatment for women with early stages (FIGO stages IA1 IB2 cervical cancer. Surgery is deemed to be the best option for young women with no comorbidities and when preservation of hormonal and sexual functions is relevant.

Methods: Systematic review of current literature on the surgical management of early-stage CC through PubMed focusing on English-language articles.

Discussion: It is essential that tailored treatment that avoids morbidity while maintaining oncologic safety is offered to all women, which is already possible in high-income countries. We should Endeavour to make this a reality for low-income countries as well. In addition fertility preservation options in the management of CC should be offered to women.

Audience Take Away Notes

- Options of management of early-stage cervical cancer
- Understand current evidence and how it applies to clinical practice
- I will be presenting to the most recent evidence in the management of early stage cervical cancer
- We aim to make options in the management clearer and will highlight the important possible pitfalls
- it will not improve the accuracy of the design or provide new information to assist in a design problem

Biography

Dr. Galaal is a senior consultant in gynecological oncology and HOD Surgical Oncology Department at the sultan Qaboos comprehensive cancer & research centre SQCCRC. Dr. Khadra has dual accreditation in obstetrics & gynaecology and gynaecological oncology. She completed accredited fellowship in Gynecological Oncology and was appointed as a consultant in the Northern Gynaecological Oncology Centre (NGOC) in Gateshead 2007. She has numerous publications in the field of gynecological oncology and is currently the Chair of the Institutional Review Board and Ethics committee. Sultan Qaboos Comprehensive Cancer Care & Research Centre (SQCCRC).



Mathoorika Sivananthan*, Jasmine Chiu, Athanasius Ishak, Nikolaos-Andreas Anastsopoulos, Rory Durham¹, Helena Martin, Michael Adebayo, Paul Dent

Department of General surgery, Croydon University Hospital, London, United Kingdom

Don't take blood in vain—a regional audit of general surgical procedures in accordance with the Maximum Surgical Blood Order Schedule (MSBOS)

Background: The Maximum Surgical Blood Order Schedule (MSBOS) is a guideline outlining the pre-operative blood transfusion requirements for elective surgical procedures. This is tailored to each hospital's surgical data and aims to allow more efficient use of blood services. The MSBOS guidance at Croydon University hospital outlines the need for Group and Save (G&S) samples prior to most elective surgical procedures. G&S samples are taken when anticipating significant blood loss with a possible requirement of a blood transfusion as this allows blood products to be matched and provided quickly in case of acute need. However, this is sampled routinely in many surgical procedures which are unlikely to cause significant blood loss. The estimated cost of a G&S sample is £20 and a processing time of approximately 120 minutes of laboratory time. Thus, unnecessary G&S blood samples can overburden the workforce and cost. Therefore, this audit analysed the benefits of reinforcing the MSBOS guidance in the trust across three different general surgical operations.

Aim: To audit the rate of post-operative transfusion needs in three general surgical operations at Croydon University Hospital, evaluate the uptake of change in MSBOS guidance and identify its potential in reducing the burden on transfusion laboratory burden and cost.

Method: Retrospective audit of inguinal and umbilical hernia repairs (7 months), partial/total thyroidectomies (4 months), elective appendectomies (2 months) and emergency appendectomies (1 year) was undertaken to review their respective pre-operative G&S sample taking practice, intraoperative blood loss and rate of intra-operative and post-operative transfusions. The analysed data was presented at the local surgical clinical governance meeting. The MSBOS guideline was updated to eliminate unnecessary pre-operative G&S sampling and the cases 5 months post-intervention were audited to review the uptake of the guidance.

Results: A total of 684 cases were reviewed in this study. Of the elective inguinal and umbilical hernia repair cases (n=251), 91% had G&S samples and 0 patients had any transfusion requirements intra-operatively or post-operatively. Post intervention (n=50), 18% of the cases had G&S samples and 0 patients required any blood transfusions. For elective partial and total thyroidectomy procedures, pre-intervention (n=50) 20% of patients had G&S samples, compared to 5% post-intervention (n=50) with 0 patients required any blood transfusions pre- and post-intervention. Pre-intervention 63% of appendectomy cases (n=250) had G&S samples with 1 post-operative blood transfusion and 0 intra-operative transfusions. 55% of post intervention appendectomy cases (n=33) had G&S samples and 0 patients required any intra-operative or post-operative blood transfusions. Overall the intervention achieved a percentage reduction in pre-operative G&S sampling in inguinal and umbilical hernia repairs (73.2%), partial/total thyroidectomies (15%), and appendectomies (8%).

Conclusions: Auditing local MSBOS guidance can provide insight to the surgical department's pre-operative practices regarding blood transfusion requirements. Regular updating of the guidelines can provide significant reduction in unnecessary tests and cost in the long term.

Audience Take Away Notes

- The audit aims to increase awareness of the MSBOS guidance to reduce unnecessary group and save blood sampling as a part of a routine pre-operative assessment
- Appreciate the cost and time savings associated with cross matching patients as required rather than routine pre-operative group and screening. This will understandably increase demand on O-negative blood and therefore requires having a sufficient reserve supply of blood

Biography

Dr. Sivananthan studied Medicine at Cardiff University, Wales and graduated with a MBChB and intercalated BSc (hons) in Medical pharmacology on 2023. She is an aspiring surgeon who is currently in training as a foundation year 2 doctor at the King's college NHS trust.



Max Shah^{1*}, Francesca Blest¹, James Blackmur^{2,3}, Alexander Laird^{4,5}, Shoba Dawson¹, Jonathan Aning^{6,7}

¹University of Bristol, Bristol, United Kingdom

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Malignant upper urinary tract obstruction in cancer patients: A systematic review

Objective: To systematically summarize the current clinical evidence for de novo malignant upper urinary tract obstruction treatment with a focus on standards of reporting, patient outcomes and future research needs.

Methods: This review protocol was published via PROSPERO (CRD42022341588). OVID MEDLINE (R), EMBASE, Cochrane Central Register of Controlled Trials – CENTRAL were searched up to June 2022 in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analyses. Prospective and retrospective studies were included.

Results: Of 941 articles identified, 82 with 8,796 patients were eligible for inclusion. Most studies in the published literature are retrospective and investigate heterogeneous malignancies. Percutaneous nephrostomy and ureteric stenting are the most studied interventions. Few studies describe the outcomes from no intervention or investigate patient perspectives. Overall reported median survival after intervention was around 11.7 months. A lack of standardised reporting of outcomes was evident.

Conclusions: Malignant upper urinary tract obstruction is an important clinical condition affecting patients globally. Overall survival after intervention appears poor however the current evidence base has significant limitations due to studies of low methodological quality and the lack of a standardised framework for reporting outcomes. We have provided a pragmatic framework for future studies based on the review to ensure a uniform methodology is utilised moving forward.

Audience Take Away Notes

- Education on an important clinical condition affecting advanced cancer patients globally. Currently there are no guidelines on treatment for these patients
- Discussion of the reported outcomes in the literature as well as the quality of that work to date
- This review encourages centres to carry out research into this understudied condition. It supports this work to be of high quality and consequently of more use to the wider community. This will begin to develop a body of research that can inform treatment decisions for these patients nearing the ends of their lives

Biography

Dr. Max Shah studied medicine at Bristol University and graduated as MBChB with distinction in 2022 alongside an intercalated BSc in Functional and Clinical Anatomy. Together with Dr Max Shah contemporary Dr Francesca Blest and under the supervision of Professor Jonathan Aning, he has completed this work as an Honorary Research Associate of Bristol University, whilst continuing his career in Manchester at Salford Royal Hospital as an Academic trainee.



Mirza Kovacevic

Department of Anesthesiology, Resuscitation and Intensive Care, Cantonal Hospital Zenica

Faculty of Medicine, Zenica, Bosnia and Herzegovina

Low T_3 versus low T_3T_4 euthyroid sick syndrome in septic shock patients-A prospective observational cohort study

Objective: To analyze clinical, hemodynamic and laboratory differences in two groups of septic shock patients with Euthyroid Sick Syndrome (ESS).

Methods: A total of 47 septic shock patients with ESS were divided according to values of the thyroid hormones into low T_3 and low T_3T_4 groups. The analysis included clinical data (demographic data, mortality scores, Intensive Care Unit (ICU) stay, Mechanical Ventilation (MV) length and 28-day survival) and laboratory with hemodynamics. Laboratory data were analyzed on the day of admission (T_0), on the first (T_1) and on the third (T_2) day with hemodynamics analyzed for the first four days every hour.

Results: The Simplified Acute Physiology Score (SAPS) II score ($p=0.029$), dobutamine ($p=0.003$) and epinephrine requirement ($p=0.000$) and the incidence of renal failure and Multiple Organ Failure (MOF) ($p=0.000$) were significantly higher for the low T_3T_4 . Hypoalbuminemia ($p=0.047$), neutrophilia ($p=0.038$), lymphopenia ($p=0.013$) and lactatemia ($p=0.013$) were more pronounced on T_2 for the Low T_3T_4 group compared to the Low T_3 group. Diastolic blood pressure (DBP) at T_0 ($p = 0.017$) and T_1 ($p=0.007$), as well as Mean Arterial Pressure (MAP) at T_0 ($p=0.037$) and T_2 ($p=0.033$) was higher for the Low T_3 group compared with the Low T_3T_4 group.

Conclusion: Low T_3T_4 population is associated with higher frequency of renal insufficiency and MOF, with worse laboratory and hemodynamic parameters. These findings suggest potentially maladaptive changes in the chronic phase of septic shock, i.e. the low T_3T_4 phase and a possible indication for therapeutic supplementation.

Audience Take Away Notes

- Septic shock as one of the biggest causes of mortality in the intensive care unit requires a multidisciplinary approach to treatment. Euthyroid sick syndrome is common in septic patients and there are still doubts as to whether it should be treated. This study showed that chronic or prolonged phase of septic shock is associated with worse laboratory parameters and hemodynamics and that it is associated with a higher frequency of renal insufficiency and multiple organ failure. The study represents a novelty in septic shock patients and it is the first to analyze differences between acute (Low T_3) and chronic/prolonged (Low T_3T_4) phase of septic shock

Biography

Dr. Mirza was born on October 31, 1988 in Tuzla, Bosnia and Herzegovina. I graduated from the Faculty of Medicine of the University of Tuzla in 2013. I have been employed at the Zenica Cantonal Hospital in the Department of Anesthesiology, Reanimation and Intensive Care since 2013. My post-graduate (doctoral) studies started in 2019 and lasted until 2024 at the University of Tuzla, where I obtained a PhD. Since then I have been actively engaged in scientific research. I am the author and co-author of several published scientific and professional works.



Mohamed Abdo

East Sussex Healthcare NHS trust, Sussex, United Kingdom,

Is my block working? Predictors of successful regional anesthesia

Over the last decade there has been multiple advances in regional anesthesia with introduction with novel nerve and plane blocks. Most of these blocks are safe to perform and can be performed under sedation or after induction of general anesthesia. Here comes the importance of ensuring effective analgesic effect of the block. Currently anesthetists rely on intraoperative clinical signs to predict effectiveness of regional techniques like heart rate, blood pressure, respiratory rate and motor response to surgical stimulation. This presentation will summarise available modalities to predict success of regional techniques.

Audience Take Away Notes

- Methods to predict success of nerve blocks under GA
- Methods to predict success of plane blocks under GA

Biography

Dr. Mohamed Abdo studied medicine at Cairo University and graduated in 2014 and started anesthetic training in Cairo university hospitals, one of the largest hospitals in the Middle East. Dr. Mohamed was awarded masters degree in anesthesia, intensive care and pain management in 2018 and worked as assistant lecturer in Anesthesia department in Cairo university. He is a diplomate of the European society of anesthesia and intensive care and currently works as specialty doctor in Anesthetics in East Sussex Healthcare NHS trust.



Neil Daniel Muscat^{1*}, Apurv Gupta², Benjamin Caruana Montaldo^{3*}

¹General Surgery NHS England Manchester, England

²General Surgery North Manchester Foundation Trust, Manchester, England

³Mater Dei Hospital, Malta



Preventing pilonidal sinus disease recurrence with laser hair epilation: A systematic review and meta-analysis of randomized controlled trials

Introduction: Pilonidal sinus disease [PSD] is a common condition associated with significant morbidity and health care costs. High recurrence rates still pose a significant challenge in the management of PSD with no universally accepted guideline in place to guide management. Laser hair epilation offers a way to reduce recurrence rates with reports within the current literature demonstrating positive outcomes in comparison to alternative approaches.

Method: This review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analysis [PRISMA] statement standards. The primary outcome measure was recurrence rate of pilonidal sinus disease at a minimum of 1 year following the primary intervention. The electronic databases of MEDLINE, EMBASE, CINAHL, google scholar, Pubmed and Cochrane Central Register of Controlled Trials [CENTRAL] were searched. OpenMeta [analyst] software was used for data synthesis.

Results: Three randomized controlled trials met the inclusion criteria with laser hair epilation treatments offering a significant reduction in PSD recurrence rates on odds ratio analysis: 0.319 [0.160, 0.636], P-value 0.0001. Secondary outcomes were discussed qualitatively.

Conclusion: The authors offer a decisive recommendation in favour of laser hair epilation in PSD however recommend for further high quality trials to investigate the ideal timing and frequency of laser hair epilation sessions.

Audience Take Away Notes

- Information regarding current literature of pilonidal sinus treatment
- Background of pilonidal disease
- Recent studies regarding hair removal in the pathophysiology and treatment of pilonidal sinus disease
- Current clinical management recommendations based on this study and future research questions proposed regarding this topic

Biography of Neil Daniel Muscat

Dr. Muscat MD graduated from the University of Malta in 2021. Dr. Muscat then moved to the UK to pursue further surgical education. The research conducted by Dr. Muscat and co-authors was conducted over a period of months following personal experience in the management of pilonidal sinus disease.

Biography of Benjamin Caruana Montaldo

Dr. Benjamin Caruana Montaldo is a medical doctor currently working at Mater Dei Hospital in Malta with a view to continue his specialization into sports medicine in the UK. He has gained a broad range of experience through both medical and surgical posts throughout his career. Dr. Caruana Montaldo is deeply committed to delivering high-quality patient care and continuously advancing his clinical skills.



Neil Daniel Muscat^{1*}, Feruza Soxibova²

¹NHS England, Manchester, United Kingdom

²NHS WWL, Manchester, United Kingdom

Cholecystectomy HRG coding

Introduction: Incorrect coding practices for surgical procedures carried out electively carries a significant financial burden on healthcare systems. In this study, we aimed to audit the coding practices pertaining to laparoscopic cholecystectomies within the NHS WWL Foundation Trust UK during November 21- October 22.

Method: A list of 194 patients undergoing a cholecystectomy along with their allocated HRG coding at time of discharge was compiled by the local coding department. A Comorbidity and Complication Index (CCI) was calculated for each of these patients using the operation note together with hospital and GP records. With this information, the correct HRG coding for each patient was calculated and compared to their allocated coding at discharge to calculate the difference in tariffs generated.

Results: 69.23% of 194 patients audited were allocated the wrong coding. This amounted to a financial burden of £72,232, with approximately £372 lost per cholecystectomy performed. Commonest CCI of 3 in 29% with corresponding HRG code GA10J.

Conclusions: High percentage of incorrectly coded procedures with significant financial implications. Current coding practice often incorrectly assumes comorbidity index.

Audience Take Away Notes

- Coding practice in the UK and how Trusts are receive financial remuneration from the government
- Importance of correct coding practice
- Encouragement to review own local coding practice and investigate own discrepancies and consequent deleterious effects

Biography

Dr. Muscat MD MRCS (Glasg) completed his Doctor of Medicine and Surgery undergraduate degree in 2021 and moved to the UK to further his education where he attained his MRCS and currently practices as a general surgery trainee.



P.A. Yartsev*, **K.V Staleva***, **B.T. Tsuleiskiri**, **Yu.S. Teterin**, **M.S. Zhigalova**, **N.V Shavrina**, **M.M Rogal**, **S.V Novikov**

The Moscow Department of Health N.V. Sklifosovsky Federal Research Institute of Emergency Medicine, Moscow, Russia



Endovascular embolization for the treatment of patients with closed abdominal trauma

Approximately 28-31% of all trauma patients with bleeding have a death. For hemodynamically stable patients with bleeding of closed abdominal trauma, endovascular angiography and embolization is a non-invasive approach that can be used to control bleeding and potentially avoid surgery.

Objective: To analyze the possibility of endovascular embolization in the treatment of patients with closed abdominal trauma.

Methods: The N.V. Sklifosovsky Research Institute for Emergency Medicine had 68 patients with closed abdominal trauma between 2022 and 2024. The study included 14 patients, who have endovascular angiography. Mean age of patients was 50 ± 19 years. Time from trauma to hospitalization was $32 \pm 47,8$ hours.

Indication for endovascular angiography was extravasation of contrast agent on computed tomography scan, traumatic hematoma (verified as blood during puncture) and free fluid in abdominal.

Endovascular embolization was in Toshiba Infinix VF-I without general anesthesia. It was local anesthetic.

For catheterization of visceral arteries used introducers 6Fr for transfemoral and transradial approaches. Merit medical vert 5Fr catheters were placed at the mouth of the damaged artery. When signs of extravasation were detected, microemboli based on PVA 500-710 or COOK embolic coils were selectively introduced through the catheter. Angiographic signs of the absence of extravasation were considered signs of effective hemostasis.

Results: An ultrasound examination of the abdomen revealed: free fluid in the abdominal cavity-12 patients (85,7%). CT scan with intravenous contrast showed: extravasation of contrast agent-10 patients (71,4%), free fluid in the abdominal cavity-12 patients (85,7%), splenic hematoma - 6 patients (42,9%), retroperitoneal hematoma-6 patients (42,9%), liver hematoma - 2 patients (14,3%).

Selective embolization of the splenic artery was in 2 cases (28,5%), renal artery embolization-2 cases (14,2%), embolization of the lumbar artery-2 cases (14,2%), hepatic artery embolization-2 cases (14,2%). We had one cases of recidive bleeding (7,1%) and one patient death (7,1%).

Patient with traumatic splenic hematoma (dimensions 28.8 x 12.9 cm) and hairy cell leukemia had recidive bleeding. It was third day after selective embolization of the splenic artery. We had image of patient with intraabdominal bleeding – according to ultrasonography there is more fluid, decrease in hemoglobin by 30 units, hypotension. After what we needed take patient in operation. We made laparotomy and saw two-stage splenic rupture AAST III. We performed splenectomy, sanitation of the abdominal cavity. The patient

was discharged in satisfactory condition. There were no complications of X-ray endovascular interventions.

Conclusions: Selective endovascular embolization is effective in hemodynamically stable patients. It can be perspective direction for patients with bleeding and closed abdominal trauma.

Biography of Petr Andreevich Yartsev

Petr Andreevich Yartsev defended his doctoral dissertation in 2008 on the topic “Laparoscopy in the diagnosis and treatment of victims with abdominal trauma.” In 2018 he received the title of professor. He is the author and co-author of 428 scientific works, including 11 monographs, 2 chapters in national manuals, 12 publications in foreign press, 11 teaching aids, 30 copyright certificates and patents. H-index 13.

Biography of Staleva Kseniya Victorovna

Staleva Kseniya Victorovna is a Research Associate and surgeon at the Department of Emergency Surgery, Endoscopy, and Intensive Care at the N. V. Sklifosovsky Research Institute For Emergency Medicine.



**Yartsev P.A*, Shavrina N.VW*, Staleva K.V,
Tsuleiskiri B.T, Teterin Yu.S, Zhigalova M.S,
Rogal M.M**

The Moscow Department of Health N.V. Sklifosovsky
Federal Research Institute of Emergency Medicine,
Moscow, Russia



Comparative informativeness of ultrasonic method and multispiral computed tomography in the diagnosis of abdominal trauma

Abdominal trauma occurs in 35% of cases in the structure of all possible injuries of organs and systems. Damage to the abdominal cavity is characterized by the multiplicity and severity of injuries and associated serious impairment of vital functions, therefore the mortality rate for this pathology remains consistently high (8-70%). The purpose of the study is to determine the comparative information content of radiation research methods (ultrasound, multislice computed tomography) in the diagnosis of various types of injuries in patients with abdominal trauma in the early stages. The prospective study included 59 patients hospitalized at the Sklifosovsky Scientific Research Institute of NP with abdominal trauma from 2022 to 2024. Injuries to internal organs were verified intraoperatively and/or based on MSCT data. All patients underwent ultrasound and MSCT in the first hours of hospitalization, on an emergency basis without prior preparation. During the study, the following indicators were assessed: the presence of free fluid in the abdominal cavity, its nature, changes in the amount over time, the state of the structure of parenchymal and hollow organs, retroperitoneal space, changes in dynamics, assessment of vascularization of hematomas, signs of ongoing bleeding. Analysis of retrospective data made it possible to establish that the sensitivity of ultrasound in detecting free fluid was 90%, the sensitivity of the MSCT method was 83%, the sensitivity of ultrasound in detecting liver injury was 72%, the sensitivity of the MSCT method was 85%. The sensitivity of ultrasound in detecting spleen injury was 84%, the sensitivity of the MSCT method was 99%, the sensitivity of ultrasound in detecting kidney injury was 52%, the sensitivity of the MSCT method was 83%, the MSCT method showed higher sensitivity values in identifying retroperitoneal hematomas - 93%, sensitivity Ultrasound was 73%. According to the results of the study, the ultrasound method showed low information content in the diagnosis of intestinal and mesenteric trauma, its sensitivity was 26%, the sensitivity of the MSCT method was 65%. Thus, the ultrasound method has shown higher sensitivity in identifying and dynamically assessing hemoperitoneum and is an important stage in the clinical diagnostic algorithm for examining patients with abdominal trauma and justifying active-wait-and-see treatment tactics. The diagnostic capabilities of MSCT make it possible to use it for the initial assessment of damage to parenchymal organs and retroperitoneal hematoma. Both methods showed low sensitivity in diagnosing intestinal and mesenteric injuries.

Biography of Petr Andreevich Yartsev

Petr Andreevich Yartsev defended his doctoral dissertation in 2008 on the topic "Laparoscopy in the diagnosis and treatment of victims with abdominal trauma." In 2018 he received the title of professor. He is the author and co-author of 428 scientific works, including 11 monographs, 2 chapters in national manuals, 12 publications in foreign press, 11 teaching aids, 30 copyright certificates and patents. H-index 13.

Biography of Natalia Shavrina

Natalia Shavrina, PhD in Medicine, is a Senior Researcher in the Scientific Department of Emergency Surgery, Endoscopy, and Intensive Care at the Institution Research Institute of Emergency Medicine named after N.V. Sklifosovsky. She completed her PhD thesis in 2024 on "Ultrasound Diagnosis of Circulatory Disorders of the Intestinal Wall in Acute Small Intestinal Obstruction." Natalia Viktorovna has authored and co-authored over 100 scientific papers, including 2 textbook chapters and 2 teaching aids. Her Hirsch index is 3.



Reda El Bayoumy

Basildon University NHS Hospital, United Kingdom

Live birth after perimortem caesarean delivery in a 27-year-old out-of-hospital cardiac arrest nulliparous woman

The perimortem caesarean section, as described in its name, is the surgical delivery of the foetus, performed during or near the time of death of the mother.

27-year-old holiday-maker from Germany on a Mediterranean beach in south of France, 36 week pregnant, no issues with pregnancy, no history of pre-eclampsia. Had a community VF-cardiac arrest, probably due to heat stroke. Fire-fighters onsite intervened immediately, D/C shock (Automated External Defibrillation AED) & CPR. 20 seconds non-flow cardiac arrest. Airway is secured by endotracheal tube. Could not retrieve the patient. Mobile ECMO team mobilized & arrived at the place in 30 minutes by helicopter. V-A ECMO was performed onsite & patient is transferred immediately to theatres by helicopter (eventually regained spontaneous circulation after half an hour). Emergency caesarean section was done immediately following heparin reversal by protamine. Male baby was delivered within 1 min, with a body weight of 2920 g and body length of 52 cm. The 1-min and 5-min Apgar scores were 0 and 5, respectively. The newborn received neonatal resuscitation and emergency intubation immediately after delivery and was then admitted to the neonatal intensive care. He received therapeutic hypothermia treatment for 72 h and erythropoietin transfusion to minimize hypoxic-ischemic encephalopathy. Patient was admitted to ICU for further management. Patient was extubated following 34 days' treatment in ICU (the patient was successfully removed from ECMO after 9 days, patient experienced ECMO-related complications, including thrombocytopenia and Intracranial Haemorrhage (ICH)... Neither long-term neurological deficits nor cognitive dysfunctions for both mom & baby.

Despite the high incidence of major bleeding, ECMO for postpartum cardiac or respiratory failure showed excellent survival outcomes. ECMO is feasible in these patients and can be carried out with good outcomes in an experienced centre.

Biography

Dr. Reda El Bayoumy has been Consultant Anaesthetist in anaesthetics & intensive care medicine. Lead regional anaesthetics, acute pain management, enhanced recovery programmes (ERP), day-case surgery unit. Lead clinician in pediatrics, obstetrics, thoracic & vascular surgery. Certificate of Eligibility for Specialist Registration in Anaesthetics (CESR) issued by Postgraduate Medical Education and Training Board (PMETB) & Royal College of anaesthetists (RCA) London, the United Kingdom April 2010. European Diploma of Regional Anaesthetics & Pain Management (EDRA) in September 2009. French Diplomas of Specialised Training in Anaesthetics and Intensive Care Medicine. Interuniversity Diploma (French Board) in Paediatric Anaesthetics and Intensive Care in October 2006 Faculty of Medicine, Lille University, France. Specialized Diploma in Anaesthetics & Intensive Care Medicine in November 2005, Faculty of Medicine, Strasbourg University, France. Medical Degree Thesis (M.D.) in Cardiothoracic Anaesthetics Faculty of Medicine, Leiden University, Netherlands Faculty of Medicine, Cairo University, Egypt, December 2000. He completed his Master of Science Degree (M.Sc.) in Anaesthetics, May 1993, Faculty of Medicine, Cairo University, Egypt. Medical Bachelor and Bachelor of Chirurgie (M.B.B.Ch.) in December 1993, Faculty of Medicine, Cairo University, Egypt. Currently working as Consultant Anaesthetist in the Mid and South Essex NHS University Hospitals, UK; Honorary lecturer in Anaesthetics and Physiology in Faculty of Medicine, Anglia Ruskin University, UK.



Reda El Bayoumy

Basildon University NHS Hospital, United Kingdom

Synchronous differential independent lung ventilation scenario: A clinical challenge

A 62-year-old man suffering from septic shock and acute respiratory failure underwent left empyema drainage and lung decortication. The patient's perioperative complications included a large air leak following the surgery, which posed a challenge for the anesthesiologist in terms of managing mechanical ventilation. The air leak mimicked a broncho-pleural fistula, which is a rare complication that can occur following lung resection, but it was not a true broncho-pleural fistula. The patient was managed with single-lung ventilation using a double-lumen endobronchial tube, but the air leak caused sudden loss of positive end-expiratory pressure and tidal volume, leading to severe refractory hypoxemia. The authors suggest that the use of differential independent lung ventilation may improve gas exchange in such cases.

Biography

Dr. Reda El Bayoumy has been Consultant Anaesthetist in anaesthetics & intensive care medicine. Lead regional anaesthetics, acute pain management, Enhanced Recovery Programmes (ERP), day-case surgery unit. Lead clinician in pediatrics, obstetrics, thoracic & vascular surgery. Certificate of Eligibility for Specialist Registration in Anaesthetics (CESR) issued by Postgraduate Medical Education and Training Board (PMETB) & Royal College of Anaesthetists (RCA) London, the United Kingdom April 2010. European Diploma of Regional Anaesthetics & Pain Management (EDRA) in September 2009. French Diplomas of Specialised Training in Anaesthetics and Intensive Care Medicine. Interuniversity Diploma (French Board) in Paediatric Anaesthetics and Intensive Care in October 2006 Faculty of Medicine, Lille University, France. Specialized Diploma in Anaesthetics & Intensive Care Medicine in November 2005, Faculty of Medicine, Strasbourg University, France. Medical Degree Thesis (M.D.) in Cardiothoracic Anaesthetics Faculty of Medicine, Leiden University, Netherlands Faculty of Medicine, Cairo University, Egypt, December 2000. He completed his Master of Science Degree (M.Sc.) in Anaesthetics, May 1993, Faculty of Medicine, Cairo University, Egypt. Medical Bachelor and Bachelor of Chirurgie (M.B.B.Ch.) in December 1993, Faculty of Medicine, Cairo University, Egypt. Currently working as Consultant Anaesthetist in the Mid and South Essex NHS University Hospitals, UK; Honorary lecturer in Anaesthetics and Physiology in Faculty of Medicine, Anglia Ruskin University, UK.



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Reactive Airway Dysfunction Syndrome (RADS) in paediatric burns: Unraveling a rare consequence of inhalational injury with management guidelines

Background: With the advancements in burn care, it is now possible for many children to survive severe burn injuries. However, inhalation injury is still considered a significant predictor of morbidity and mortality in burn injury cases. When a child inhales smoke and toxic gases, it can lead to various pulmonary complications, such as airway obstruction, pulmonary edema, decreased pulmonary compliance and ventilation-perfusion mismatch. Additionally, it can also result in systemic toxicity due to carbon monoxide poisoning and cyanide toxicity. Inhalation injury is diagnosed based on the patient's medical history and physical examination and confirmation done through bronchoscopy. Over a 10-year period, 850 paediatric burn patients with inhalation injury were reviewed across multiple centre, revealing a mortality rate of 16%. The primary cause of death was pulmonary dysfunction and sepsis. However, for those who required mechanical ventilation for over a week, mortality rates increased from 25% to 50%.

Discussion: Survival rates for inhalational injuries in paediatric thermal burn patients are exceptionally low. This report highlights two cases at the AIIMS New Delhi Burns and Plastic Department involving electric flash burns. Both patients received intensive care in the ICU for three months. During the course of treatment, one patient developed reactive airway disease, necessitating intubation twice, with subsequent challenges in weaning and the eventual need for tracheostomy. Persistent hypercapnia posed difficulties during decannulation.

After three months of dedicated multidisciplinary efforts, including coordinated care by anaesthesiologists and critical care teams, along with support from paediatric and pulmonology departments, both patients achieved successful decannulation post tracheostomy. Sustained room air saturation of 97% was maintained in the first patient. The same algorithm was applied to the second patient, resulting in survival for both. Additionally, ongoing daily care, dressing and debridement by plastic surgeons played a crucial role in the comprehensive management of these challenging cases.

Conclusion: We had discussed the challenges faced in the management of reactive airway dysfunctional syndrome due to inhalational injury in paediatric patients and the treatment algorithm for the same which requires a low threshold for suspecting, more common in resource-limited countries due to economic constraints, so more studies are needed from such countries.

Biography

Dr. Sainath Veeranki is currently pursuing senior residency at All India Institute of Medical Sciences in New Delhi. He completed his MD in Anaesthesiology, Pain Medicine and Critical Care from the same prestigious institution. Before this, He served as a Medical Officer at KIMS and Zydus Hospital in Ahmedabad, gaining valuable practical experience. He is passionate about contributing to medical knowledge, as evidenced by his three publications currently under review and three international oral and poster presentations. His areas of interest in Difficult airway, Regional anaesthesia and obstetrics and gynecology.



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Comparison of the effect of Ketofol and Ketodex as procedural sedation and analgesia for oocyte retrieval during in-vitro fertilisation procedures-A randomized controlled pilot study

Introduction: Infertility affects 10-15% of couples, prompting assisted reproductive techniques IVF. Oocyte retrieval in IVF induces pain, correlating with follicle aspiration duration. Current anesthetic agents, including midazolam, propofol and fentanyl, pose drawbacks and impact oocyte quality. These anesthetic agents, in addition, are found in the follicular fluid, which has detrimental effects on oocyte fertilization and embryonic development. Propofol's presence in follicular fluid affects fertilization negatively. The study hypothesizes that KETODEX (ketamine with dexmedetomidine) provides superior pain relief during IVF compared to KETOFOL (ketamine with propofol) with minimal effects on fertility and cleavage.

Aims and Objectives: The primary objective is to compare cumulative pain scores between KETODEX and KETOFOL intraoperatively and within 2 hours post-retrieval, assessing impacts on oocyte quality, fertility, cleavage, and pregnancy rate. Additionally, the study aims to provide opioid-free analgesia during IVF oocyte retrieval.

Materials and Methods: This Open-Label Single-Center Randomized Controlled Trial at AIIMS, New Delhi, involves patients aged 20-40, ASA grade I-II, scheduled for oocyte retrieval. Randomization via computer-generated numbers assigns patients to either the KETOFOL [KP] (Ketamine with propofol) or KETODEX [KD] (Ketamine with dexmedetomidine) group of sample size 30 each. Exclusion criteria include BMI >35, ASA grade III-IV, refusal of consent, allergies to study drugs, autonomic dysfunction, uncontrolled systemic illnesses, and chronic diseases. Pre-anesthetic check-ups and informed consent precede surgery, with specific fasting protocols. Intraoperatively, groups receive designated drug combinations, with doses adjusted based on sedation scores, and BIS levels. The study aims to evaluate anesthetic efficacy, pain, and patient outcomes.

Results: This abstract summarizes statistical analyses in the thesis, employing the Kolmogorov-Smirnov test for data normality. Nonparametric tests, including the Mann-Whitney Test and Independent t-test, assessed variables. In the KP group, propofol doses in milligrams (mean±SD: 242±52, median: 250) and rescue boluses (mean±SD: 97.33±30.5, median: 95) surpassed the KD group. Ketamine dose in milligrams (mean±SD: 32.33±7.74, median: 30) and surgery duration in minutes (mean±SD: 24.17±7.44, median: 20) showed no significant differences. Lower fertility rates were observed in KP ($p < 0.0007$), with comparable cleavage rates on days 2 and 3 but higher in KD. Intraoperative rescue analgesic need (60%) and complications (53.33%, $p < 0.0001$) were higher in KP. KP exhibited a shorter time to awakening (mean 3.8±1.37, median 4 [3-4.75], $p < 0.195$). Although postoperative pain scores showed no significant difference, mild pain (VAS) occurred in KP at 10 and 30 minutes, contrasting with KD's pain-free status until 2 hours postoperatively. Top of Form

Conclusion: In the KD group, comprising ketamine and dexmedetomidine, stable hemodynamics were maintained during IVF procedures and no respiratory distress or apnea occurred. Oocyte grades showed no significant differences, with no impact on embryo quality and fertility rate. However, KD exhibited higher cleavage rates at day 2 and day 3 compared to the KP (ketamine with propofol) group, suggesting improved pregnancy outcomes. The KD group experienced minimal pain intraoperatively and up to 2 hours postoperatively, contrasting with the 60% of patients in the KP group requiring fentanyl and reporting mild pain. KD demonstrated fewer complications (PONV) both intra and post-operatively. Notably, both surgeons and patients expressed higher satisfaction in the KETODEX group.

Biography

Dr. Sainath Veeranki is currently pursuing senior residency at All India Institute of Medical Sciences in New Delhi. He completed his MD in Anaesthesiology, Pain Medicine and Critical Care from the same prestigious institution. Before this, He served as a Medical Officer at KIMS and Zydus Hospital in Ahmedabad, gaining valuable practical experience. He is passionate about contributing to medical knowledge, as evidenced by his three publications currently under review and three international oral and poster presentations. His areas of interest in Difficult airway, Regional anaesthesia and obstetrics and gynecology.



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Innovative approaches in restoring fecal continence: The modified preanal-repair concept for post-childbirth trauma

Fecal incontinence (FI) is a distressing condition that severely impacts the quality of life, leading to profound psychological, social, and physical challenges. Affecting approximately 2% of the general population, its prevalence is notably higher in elderly individuals and those in long-term care facilities. Among the most significant causes of FI are sphincter injuries resulting from childbirth, which, if not adequately addressed, can lead to chronic incontinence and a substantial decrease in the quality of life.

The modified Preanal-Repair concept, a surgical innovation developed and refined in our clinic since 2000, offers a novel and effective solution for patients suffering from FI, particularly those with sphincter injuries, whether recent or old. This technique encompasses a series of reconstructive steps that aim to restore the integrity and function of the anal sphincter and pelvic floor. Crucially, it avoids the resection of scar tissue, thereby minimizing the risk of further damage and preserving sphincter function.

The procedure involves overlapping sphincter muscles using a non-resorbable suture technique, which enhances the repair's stability and durability. By addressing concomitant issues such as rectocele and perineal descent, the modified Preanal-Repair concept not only improves continence but also enhances the overall pelvic floor function. Clinical outcomes have demonstrated significant improvements in continence and patient quality of life, even in cases with longstanding injuries. Ongoing follow-up studies are expected to further validate these positive outcomes.

Audience Take Away Notes

- Comprehensive insights into the epidemiology, etiology, and psychosocial impacts of fecal incontinence, with a focus on childbirth-related trauma
- Detailed procedural knowledge of the modified Preanal-Repair technique, including its indications, surgical steps, and postoperative care
- The significance of early and effective intervention in managing sphincter injuries to prevent chronic fecal incontinence and improve long-term outcomes
- Healthcare professionals, particularly those in surgical and gynecological specialties, will acquire practical knowledge that can be directly applied in clinical settings. The presentation will equip them with the necessary skills to implement the modified Preanal-Repair technique, thereby enhancing their ability to manage complex cases of fecal incontinence. Furthermore, the insights gained will enable them to better counsel patients regarding treatment options and expected outcomes
- The refined surgical approach presented will expand the therapeutic arsenal available to surgeons and gynecologists, enabling them to offer more effective and tailored treatments for patients suffering from fecal incontinence. By improving surgical outcomes and reducing the likelihood of recurrence, this technique will contribute to better patient satisfaction and a higher standard of care in their practice

- This presentation provides a foundation for further research into the long-term efficacy and safety of the modified Preanal-Repair technique. It also serves as a valuable educational resource for faculty teaching advanced colorectal surgery and pelvic floor disorders, offering a detailed case study that can enhance both research and teaching efforts
- The modified Preanal-Repair concept offers a practical and streamlined solution for the surgical repair of sphincter injuries. By avoiding the resection of scar tissue and employing a stable, overlapping suture technique, the procedure simplifies the repair process while ensuring more reliable outcomes, making it an efficient choice for surgeons
- The surgical technique presented introduces new insights into the management of sphincter injuries, providing a more accurate and reliable method for restoring continence. This innovative approach could influence the design of future surgical protocols and training programs, ensuring that they incorporate the most effective and up-to-date practices in fecal incontinence management

Biography

Dr. Sherif Akram Metwalli is a distinguished consultant surgeon specializing in colorectal and bariatric surgery. Dr. Sherif completed medical education at Cairo University, followed by advanced postgraduate training in France, England and Germany, where he currently practices at The Department of General and Colorectal Surgery at Bielefeld University. Dr. Metwalli has been at the forefront of refining the modified Preanal-Repair technique, contributing significantly to the field of incontinence and colorectal surgery. Dr. Sherif work is widely recognized, and he has published extensively on surgical innovations for managing fecal incontinence and other pelvic floor disorders.



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Congenital aglossia-Anticipated difficult airway and anaesthesiologists quest to secure it

Background: The congenital absence of the tongue, known as Aglossia congenita, is an exceptionally rare malformation. The anticipation of a difficult airway can be established through a mere clinical examination of the oral cavity.

Case Report: The case of congenital aglossia depicted above was referred from the Plastic Surgery department to the Department of Anesthesiology, AIIMS New Delhi for pre-anesthetic assessment, as the patient was scheduled for an MRI. A 2-year-old male, weighing 10 kg, presented with challenges in feeding, regurgitation of food from the nasal cavity, recurrent upper respiratory tract infections since birth and difficulties in speech.

Clinical examination revealed retrognathia, cleft palate, the soft palate touching the floor of the mouth with malalignment of the uvula, absence of the tongue, edentulous condition and a reduced oropharyngeal space.

Discussion: This case presents an anticipated difficult airway, marked by retrognathia and a grade 3 cleft palate, posing challenges for mask ventilation and nasal intubation. The narrowed space makes the use of a supraglottic airway device challenging. Consequently, the only viable options remaining are awake oral intubation and tracheostomy. However, performing these procedures in the pediatric age group is complicated, especially in peripheral setups like MRI suites where advanced airway equipment may be unavailable.

A similar case, documented by Mohamed Hegaz, involved tracheostomy in a neonate with an uncomplicated uvula, highlighting the rarity and complexity of such situations. In our approach, we proactively secured a smaller-than-usual endotracheal tube in the operating room to mitigate the need for surgical airway manipulation.

Learning Points: This case report highlights the challenge of establishing a definitive airway when backup plans for a difficult airway are limited.



Biography

Dr. Vinay Balnath Gaikwad is currently pursuing senior residency at All India Institute of Medical Sciences in New Delhi. He completed his MD in Anesthesiology, Pain Medicine and Critical Care from the same prestigious institution. He is passionate about contributing to medical knowledge, as evidenced by his two publications currently under review. His areas of interest in Difficult airway and Paediatric Anaesthesia.



William W. Lines-Aguilar*, Luis J. Saavedra, Miguel Lozano, Dennis Heredia, Mao Vásquez

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Multimodal minimally invasive surgery in the treatment of neurocysticercosis

Introduction: Neurocysticercosis (NCC) is still a frequent cause of neurosurgical consultations in most developing countries. Conventional approaches for the resection of large cysts have been used for many years. We report here our experience in the neurosurgical management of NCC using diverse minimally invasive approaches according to the localization of lesions: minimal craniotomy for lesions in the Sylvian fissure, stereotactic surgery for lesions in the posterior fossa and endonasal neuroendoscopy for lesions in the basal cisterns.

Methods: We reviewed the charts of 24 consecutive NCC patients who had minimally invasive surgery to resect NCC lesions in a neurological referral center in Lima, Peru. Three approaches were used: microcraneotomies through the anterior Sylvian point (n=16), stereotactic surgery (n=6) and endonasal endoscopy (n=2), between January 1, 2016 and July 31, 2022. Demographic and clinical data as well as post-surgical evolution are presented using descriptive statistics.

Results: Clinical improvement was observed in 23 out of 24 cases, with complete resolution of symptoms in nine and partial in 14. One patient evolved poorly and worsened his symptoms. Twenty-two patients received antiparasitic treatment after surgery. Relapse of NCC lesions was observed in three patients.

Conclusions: Minimally invasive surgical approaches provide an excellent alternative for the management of patients with NCC, with good surgical and functional results, also markedly reducing the parasitic mass for further antiparasitic treatment.

Keywords: Neurocysticercosis, Minimally Invasive Surgery, Endonasal Endoscopic, Anterior Sylvian Point, Stereotactic Surgery.

Audience Take Away Notes

- Neurocysticercosis is a public health problem that generates a lot of neurological morbidity. We must be prepared to offer our patients new surgical treatment approaches
- Many years of experience treating patients with neurocysticercosis allowed us to treat these patients with minimally invasive surgeries with good functional results
- This information will be useful for neurosurgeons, neurologists and professionals related to public health
- That's right, these minimally invasive procedures allow these patients to be treated with minimal trauma and could be replicated in any hospital
- Without a doubt, minimally invasive approaches in neurosurgery allow us to treat all types of pathologies with minimal manipulation of healthy brain tissue

List all other benefits

- They are new forms of neurosurgical treatment for NCC
- Accessible to any Hospital

Biography

William Lines-Aguilar completed the specialty of Neurosurgery at the National Institute of Neurological Sciences of Peru and a High Specialty Course in Skull Base Surgery and Endoneurosurgery at the National Institute of Neurology and Neurosurgery in Mexico. He is currently Head of the Skull Base and Endoneurosurgery Unit of the National Institute of Neurological Sciences in Lima, Peru. Dr. Lines has authored multiple publications in renowned peer-reviewed neurosurgery journals and is also a member of the Institutional Research and Ethics Committee.



Zeana Amer Gawe MBBCH.MD, SABA.DAMASCUS

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Comparison between the Caudal Block and other methods of postoperative pain relief in children undergoing circumcision

Background: Caudal block (CB), dorsal nerve penile block (DPNB) and systemic opioids are common techniques used in pediatric surgeries to provide analgesia for penile surgery such as circumcision. This study aimed to compare the effectiveness of the CB with other methods of postoperative pain release.

Methods: This prospective, randomized, case-controlled trial was conducted in the main pediatric operation theater and post-anesthesia recovery unit (PACU). Successive children aged 3 months to 3 years who had American Society of Anesthesiologists Physical Status classification I and had undergone elective circumcision surgery were recruited. Children were randomized to one of 3 groups, CB (Group A), systemic opioids (Group B), or DPNB (Group C). Patients were injected with 0.75 to 1 mL/kg 0.25% bupivacaine in group A, fentanyl 1-3 µg/kg in group B, and 0.3 mL/kg 0.25% bupivacaine in group C. The need for analgesia and parental satisfaction were assessed during the first 6 hours postoperatively. The Face, Leg, Activity, and Cry Consolability (FLACC) pain scale and behaviors were used to observe and compare the three groups.

Results: Participants' heart rate was higher among group C, while it was the lowest in group A during the observation period ($P < 0.05$). High pain, crying, movement, agitation, and posture scales were observed among group C followed by group B, while group A showed the lowest scores. Patients who received penile block had expressed a longer time to achieve the "relaxed and comfortable" status but with no significant difference with the other two groups. Moreover, types of regional block were mainly the significant predictor of pain scale at 5, 10, 20, 30, and 60 minutes postoperative.

Conclusions: For postoperative pain management, the study has shown that CB is proven to produce higher levels of analgesia and a longer period of pain release compared to penile block, even if both methods help relieve pain during pediatric surgical procedures.

Keywords: Caudal; Pediatric; Penile block; Opioids; Circumcision; Postoperative analgesia

Biography

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SEPT

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Surgery and Anaesthesia

POSTERS



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Serum bilirubin level as a laboratory marker in acute appendicitis

Background: Acute appendicitis is the most common acute abdominal condition. For many decades, the diagnosis has depended mainly on clinical examinations, laboratory investigations such as leukocytosis and abdominal sonography. Occasionally it can be challenging to reach the diagnosis, as there many differential diagnoses for right iliac fossa pains, especially in women. Thus, there is an encouraging demand for laboratory markers for the diagnosis.

Objective: Our study aims to the assessment of total serum bilirubin level as a laboratory marker for diagnosing acute appendicitis.

Methods: A prospective study collected data from 500 patients. All patients' demographic details, duration of symptoms, vital data and blood samples collected on admission for full blood count and liver function tests including bilirubin. All the removed appendices will be sent for histopathological examination and were classified into 5 groups according to the histological diagnosis, variable from no pathological findings in the First group, to acute necrotizing appendicitis in the fifth group.

Results: There were major differences between each group as regards the duration of symptoms in hours until the time of taking the samples. There was no difference between the patients regarding the temperature and the pulse rate, but Total Serum Bilirubin (TSB) was ≥ 1.00 (mg/dl), with a sensitivity of 58% and specificity of 82%, with a diagnostic accuracy of 70%. White Blood Cells (WBCs) were ≥ 11 ($\times 10^3/\mu\text{L}$), with a sensitivity of 68% specificity of 66% and diagnostic accuracy of 67%.

Conclusion: TSB is a valuable indicator of patients having acute appendicitis, with higher specificity than WBCs.

Biography

Dr. Ashraf Elmetwally studied Medicine in Egypt, Graduated 1998. He started training in General surgery 2001, where he was specialised in Upper Gastrointestinal Surgery. He had further higher surgical training fellowship in London, UK 2009 -2011. He holds MD in General Surgery & Fellowship of Royal College of Surgeons of England (FRCS). He appointed as a consultant surgeon since 2014. Currently working as a Consultant General & Upper GI Surgeon at North Cumbria Integrated Care NHS Foundation Trust, United Kingdom.



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The impact of advance directives on decision-making for emergency surgery in elderly patients with stage IV cancer

Introduction: Advance directives are legal documents that allow patients to articulate their preferences for medical treatment in situations where they are unable to make decisions. They are particularly crucial in end-of-life care, ensuring that patients' wishes are respected even when they can no longer communicate. Despite their importance, the role of advance directives in the decision-making process for emergency surgeries in elderly patients with terminal cancer remains unclear. This study aims to evaluate whether the presence of an advance directive influences the decision to perform emergency surgery in patients aged 65 and older with stage IV cancer and to assess the subsequent clinical outcomes.

Methods: This retrospective study included patients aged 65 and older with stage IV cancer who were referred for surgical consultation from emergency department to general surgery department between 2019 and 2023. The primary outcome was decision to perform emergency surgery. Secondary outcomes included in-hospital mortality, complication rates, length of hospital stay, and hospitalization costs.

Results: The presence of advance directives did not significantly influence the decision to perform emergency surgery in elderly patients with stage IV cancer. Furthermore, there was no significant difference in mortality or complication rates based on advance directive status. However, patients who undergone emergency surgery experienced longer hospital stays, higher complication rates and higher hospitalization costs, regardless of whether they had an advance directive.

Discussion: For elderly patients with stage IV cancer, emergency surgery may provide immediate relief from pain, but it cannot stop the progression of the disease, often leading to complications, prolonged hospital stays, and excessive medical expenses. In particular, for patients who have advance directives—having made their own treatment decisions while they were mentally competent—these directives should be given significant consideration to prevent such worst-case scenarios.

Audience Take Away Notes

- This study provides valuable insights into the impact of advance directives on surgical decision-making in elderly patients with terminal cancer. These findings may inform clinical guidelines and improve decision-making processes in emergency surgical care for this vulnerable population

Biography

Dr. Shin studied medicine at the Konyang University, Republic of Korea and graduated as MD in 2018. Dr. Shin then did resident and fellowship in the department of general surgery at the Seoul National University Bundang Hospital (SNUBH). Dr. Shin received MS degree in 2024 at the Seoul National University College of Medicine. Dr. Shin obtained the position of consultant physician in the department of surgical critical care at the same institution (SNUBH).



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Assessing physiologic stress in outpatient surgery with local anaesthesia

Background: Outpatient surgery often depends on local anaesthesia to prevent physiologic stress and pain during procedure. However, local anaesthetic injection and surgical procedure may still act as a stressor for patients. In the current study, we explore the physiologic status of patients undergoing outpatient surgery at a Mohs clinic through blood pressures at multiple timepoints and continuous heart rate via Apple Watch.

Methods: Blood pressure was measured by standard sphygmomanometer at 5 timepoints: at baseline, before local anaesthetic injection (2% lidocaine with epinephrine, 1:100,000), after the first stage of surgical procedure and 5-10 minutes following the previous measurement. Heart rate was measured continuously by an Apple Watch. Repeated Measure Analysis of Variations (RM-ANOVA) and post hoc t-tests tested significance for systolic pressure, diastolic pressure, pulse pressure and mean arterial pressure. Mathematica was used for analysis and visualization of continuous heart rate data. This was an IRB-approved study conducted in an academic dermatology clinic.

Results: Through RM-ANOVAs, we found a significant effect of time from before through after surgical procedure on diastolic pressure and moving average pulse pressure. Systolic pressure was elevated above 140 mmHg on average without significant change throughout. For diastolic blood pressure, statistically significant differences were found between baseline and before injection ($p=0.003$), between baseline and after stage 1 ($p=0.005$) and between baseline and 5-10 minute later ($p=0.002$). For the calculated pulse pressure, the only time point that had a statistically significant difference was between baseline and after stage 1 ($p=0.04$). For the calculated mean arterial pressure, significant differences were found between baseline and before injection ($p=0.04$) as well as between baseline and 5-10 minute later ($p=0.01$). In the minutes following injection, there was an average increase in heart rate change over time following an overall sinusoidal pattern. After stage 1 of Mohs micrographic surgery, we found a significant decrease in blood pressures.

Conclusion: Our study demonstrates a heightened physiologic state before injection, an immediate sinusoidal response of heart rates to local injection and a reduction of physiological stress following the completion of the first stage of outpatient surgery. We found larger moving-average pulse pressure changes before injection and after stage 1, which is consistent with our understanding that injection and Mohs surgery are the two physical stressors in our study. No significant average differences in blood pressure were found between before and after injection, suggesting that the stress of the local anesthetic event did not quickly dissipate the physiological anticipation and response to the local injection. Our findings are useful for clinicians to understand the specific timing of when patients experience a sympathetic response during MMS. Since we found that cardiovascular change increases in the period preceding injection and remains heightened through the first surgical stage, we conclude that interventions should focus on preventing this increase in physiological response.

Audience Take Away Notes

- From the Apple Watch data graphs, they will understand that the dynamic change in heart rates dependent on the individual patient – promoting individualized care
- By understanding a model of how to use wearable technology to advance patient care in the future
- They will be able to know when to focus their care for patients with cardiac conditions, which warrant close monitoring of cardiovascular status during outpatient surgical procedures

List all other benefits

- Not all outpatient surgical clinics, such as in Mohs surgery, measure patient physiology at multiple timepoints. This work reminds current outpatient surgeons of the dynamics of patient physiology surrounding surgical procedure in addition to the surgical procedure itself
- This work expands the current field of stress from Mohs surgery or other outpatient surgeries by providing multiple timepoints of measurement
- This provides information that calls for a focus on preventing or at least minimizing patient stress. By informing the audience on where physiologic stress occurs in outpatient surgery – which is not just the surgery itself – providers are better equipped to provide patient care cognizant of patient status

Biography

Julian Henke studied physics and music performance at Emory University and graduated with a BS in 2021. He is pursuing his MD at the same institution. He has previous experience with Dr. Simon's inflammation lab at the University of California, Davis to produce microfluidic devices modeling immune function in dermal tissue. Current work at Emory University includes 3D imaging, high frequency ultrasound, incorporating smart watch wearable devices in patient care and research. His interests and future works include improving patient stress with binaural beats as well as Multiphysics modeling of disease and treatment.



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Fastening the future: Surgical zip ties for enhanced wound closure and patient well-being

Emerging as a revolutionary approach in wound closure, surgical zip tie skin closures present a promising avenue for advancing patient safety and surgical success. This review discusses how current research highlights the efficacy of zip tie closures in promoting wound healing, reducing the risk of dehiscence and enhancing cosmetic outcomes across various surgical procedures. Future investigations should examine optimizing zip tie design and material properties to ensure compatibility with different skin types and surgical sites, as well as exploring their potential applications in minimally invasive and robotic-assisted surgeries. Collaborative efforts between surgeons, engineers and biomaterial scientists are essential for refining zip tie closure systems, conducting rigorous clinical trials and establishing standardized protocols for their integration into routine surgical practice, ultimately revolutionizing wound management and improving patient outcomes.

Audience Take Away Notes

- The audience will learn about a revolutionary approach to wound closure
- This research may help the audience expand their surgical techniques by implementing surgical zip ties into their practice
- Exemplifies techniques that promote wound healing, reducing the risk of dehiscence and enhancing cosmetic outcomes across various surgical procedures
- The audience will be provided with new information to improve patient outcomes

Biography

Dr. Karla Radillo obtained an undergraduate degree in Biology from Kennesaw State University and graduated as an MD from Universidad Autónoma de Guadalajara, Mexico in 2023. She then joined the research team of Dr. Sangini S. Sheth under the Department of Obstetrics, Gynecology & Reproductive Sciences as a Research Associate affiliated with Yale School of Medicine and Yale Center for Clinical Investigation. Interests include women's and reproductive health as well as inclusion and health equity studies within the clinical setting.

Lan Kong

Dianjiang People's Hospital, China

Shear-wave elastography combined with superb microvascular imaging for evaluating histologic response in breast cancer patients receiving neoadjuvant chemotherapy

Background: The Shear-Wave Elastography (SWE) and Superb Microvascular Imaging (SMI) are novel ultrasound imaging techniques to evaluate tissue hardness and blood flow characteristics, respectively. The utility of these techniques for evaluating histologic response in breast cancer patients receiving neoadjuvant chemotherapy remains unknown.

Methods: A total of 49 breast cancer patients receiving neoadjuvant chemotherapy between January 2023 and September 2023 at *** Hospital were scanned with SWE, SMI and gray-scale ultrasonography at baseline and the end of neoadjuvant chemotherapy. Ultrasound parameters, including maximum tumor Diameter (Dmax), maximum elastic value (Emax), Peak Systolic Velocity (PSV) and Resistance Index (RI) at both scan session were obtained. The histologic response for breast cancer following neoadjuvant chemotherapy was classified as non-response (Miller-Payne's grade 1-2) or response (Miller-Payne's grade 3-5). The receiver-operating characteristic (ROC) curve, binary logistic regression and descriptive comparison were performed.

Results: 13 and 36 patients were categorized into the non-response group and response group, respectively. The percentages of change of Dmax, Emax, PSV and RI were significantly higher in the response group than those in the non-response group. The binary regression model suggest that ΔE_{max} (OR 0.842), ΔPSV (OR 0.942) and ΔRI (OR 0.802) were independently associated with pathologic response. ROC curves showed that the area under the curve for distinguishing the non-response group from the response group was largest for ΔRI (AUC=0.811) and area under the curve for the combined regression model was 0.921.

Conclusions: Combined use of SWE and SMI may be useful for the preoperative identification of non-responsiveness in breast cancer patients receiving neoadjuvant chemotherapy.

Liangyan Li

Chongqing Dazu District Maternal and Child Health Hospital, China

Application effect analysis of personalized nursing intervention based on KANO model in patients with chronic cervicitis after hysteroscopic electrotony

Objective: To analyze the effect of individualized nursing intervention based on KANO model in patients with chronic cervicitis after hysteroscopic electrotony.

Methods: A total of 90 patients diagnosed with chronic cervicitis and treated by hysteroscopic electrotony in our hospital from June 2021 to June 2023 were randomly divided into control group and observation group, with 45 cases in each group. The control group received general postoperative intervention and the observation group received KANO mode of nursing intervention. Both groups received continuous nursing for two weeks. The changes of self-rating Depression Scale (SDS), Self-Rating Anxiety Scale (SAS) and Quality of Life Scale (SF-36) scores before and after care were compared between the two groups, the differences of treatment compliance and satisfaction with nursing during hospitalization were compared between the two groups and the probability of postoperative complications (general fatigue, vaginal fluid, wound infection, etc.) were compared between the two groups.

Results: There were no significant differences in operation time and intraoperative blood loss between the two groups ($P>0.05$). The time of first exhaust and getting out of bed in the observation group were shorter than those in the control group, (1.02 ± 0.43) vs (2.26 ± 0.67) (1.89 ± 0.37) vs (3.48 ± 0.82), respectively ($P<0.05$). The treatment compliance ($\chi^2=4.41$, $P=0.04$) and total nursing satisfaction ($\chi^2=4.05$, $P=0.04$) of the observation group were significantly better than those of the control group. After nursing, the SDS and SAS scores of the two groups were lower than those before nursing and the scores of the observation group were (31.58 ± 3.14) and (22.79 ± 2.58), respectively, which were lower than those of the control group (39.26 ± 3.01) and (30.12 ± 2.79) ($P<0.05$). After nursing, the quality of life scores of the observation group were significantly higher than those of the control group (55.29 ± 8.37) vs (69.36 ± 9.12). The hospitalization time and postoperative recovery time in the observation group were shorter than those in the control group (3.12 ± 0.78) vs (5.26 ± 1.21), (10.29 ± 3.18) vs (15.37 ± 3.56), respectively. The complication rate of the observation group was lower than that of the control group ($\chi^2=6.05$, $P=0.01$).

Conclusion: Individualized nursing intervention based on KANO model can reduce the degree of depression and anxiety, improve the quality of life of patients and facilitate postoperative recovery in patients with chronic cervicitis after hysteroscopic electrotony.

Keywords: Chronic Cervicitis, Hysteroscopic Electrotony, KANO Model, Nursing Intervention, Application Effect Analysis.



Liu Wenbin

Chongqing University Cancer Hospital

Associations between tumor-infiltrating neutrophils and clinical outcomes in patients with hepatocellular carcinoma undergoing surgical resection: A single-center retrospective study

Background: Neutrophils have been previously shown to be implicated in the pathogenesis of hepatocellular carcinoma and serve as a critical component of the tumor microenvironment. However, the exact relationship between tumor-infiltrating neutrophils and clinical outcomes for hepatocellular carcinoma undergoing surgical resection remains largely unexplored. The present study aimed to elucidate the association between tumor-infiltrating neutrophils and Time to Recurrence (TTR) in hepatocellular carcinoma undergoing curative resection.

Methods: In this single-center, retrospective observational study between April 2021 and October 2023, immunohistochemical staining for CD66 (neutrophil biomarker), CD4 and CD8 (T cell biomarker) were performed in the specimens of hepatocellular carcinoma from 138 patients. Demographic, clinical and laboratory data were all collected. The primary endpoint TTR was defined as the time interval from surgical resection to recurrence of any causes. Multivariable Cox proportional hazard regression model was applied to assess the relationship between tumor-infiltrating neutrophils and TTR.

Results: A higher CD66+ infiltrating neutrophils was significantly positively associated with increased CD8+ T cells ($r=0.41$, $P=0.008$). During a median follow-up of 29 (interquartile range 16-30) months, 49 (35.51%) reached the primary endpoint. Kaplan-Meier survival analysis showed that those with a higher CD66+ cell count had significantly lower TTR than those with a lower CD66+ count ($P<0.01$). Multivariable-adjusted Cox proportional hazard regression analysis indicated that a higher Barcelona Clinic Liver Cancer classification (HR=2.42, 95% CI 1.42-4.01), higher AFP>400ng/ml (HR=1.52, 95%CI 1, 21-1.80) and increased neutrophil infiltration (HR=1.99, 95% CI 1.53-2.52) were independent risk factors for a shorter TTR.

Conclusion: A higher tumor-infiltrating neutrophil is an independent and useful histologic predictor for unfavorable clinical outcomes in patients with resectable hepatocellular carcinoma.

Keywords: Tumor-Infiltrating, Neutrophils, Hepatocellular, Carcinoma, Surgical Resection.

Biography

Liu Wenbin is an Attending Physician at the Hepatic Biliary and Pancreatic Cancer Center of Chongqing University Cancer Hospital. He is committed to the education, scholarly investigation and clinical investigation in the field of hepatobiliary and pancreatic surgery. His expertise encompasses the diagnosis and management of prevalent, recurrent, benign and malignant neoplasms affecting the liver, gallbladder, pancreas and spleen. He has authored numerous scientific articles in SCI-indexed and core medical journals both domestically and internationally. His research focuses on hepatocellular carcinoma differentiation, cancer stem cells, the tumor microenvironment, hepatic progenitor cell differentiation and developmental biology.



Lucas G Carelli*, Phaethon Karagiannis, Pratik Rastogi
Royal Prince Alfred Hospital, Sydney, Australia

Advances in pedicled flap for lower third sternal reconstruction after sternotomy dehiscence

Introduction: Sternotomy dehiscence represents a significant complication post-coronary artery bypass surgery, necessitating effective sternal reconstruction techniques. Traditional methods, including Pectoralis muscle advancement, Rectus Abdominis muscle flap and Omental flap, have been complemented by innovative approaches. This study reviews the evolution of these techniques, focusing on their application for the lower third of the sternum.

Method: A comprehensive literature review was conducted, spanning articles from the 1980s to 2023, sourced from online databases by the Northern Sydney Health District Library. The search focused on sternal reconstruction techniques, particularly those that use flaps to address the Lower Third Sternal Reconstruction (LTSR).

Discussion: The study highlights the effectiveness of Rectus Abdominis Muscle (RAM) and Pectoralis Major flaps (PM), either alone or in combination, for LTSR. Variations of flaps were discussed, such as the tri-pedicle pectoralis major myocutaneous flap. Innovations include laparoscopic harvesting of the RAM-PM flap and adaptations of the RAM flap utilising intercostal perforation techniques, even with previous harvesting of ipsilateral and bilateral internal thoracic arteries. Comparative analyses underscored the limitations and advantages of various techniques, focusing on minimizing complications and optimising aesthetic and functional outcomes.

Conclusion: The continuous evolution of sternal reconstruction techniques, particularly for the challenging lower third sternum, underscores the importance of innovation in addressing complex surgical challenges. We have not identified a breakthrough addressing the LTSR, but the authors have demonstrated different techniques using well-known flaps. Future research should focus on refining these techniques and exploring new materials and methods to improve patient outcomes post-sternotomy dehiscence.

Biography

Dr. Lucas Guimaraes Carelli is an unaccredited surgical trainee attached to the Sydney Local Health District Surgical Skills Network and graduated MD from Saint Petersburg State Medical University in 2017.



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Acellular fish skin grafts in wound reepithelisation

Introduction: This synthesis reviews recent research on the efficacy of acellular Fish Skin Grafts (FSG) and Nile Tilapia Fish Skin (NTFS) in promoting reepithelialisation and reducing wound surface area in various types of wounds, including chronic Diabetic Foot Ulcers (DFUs), Venous Leg Ulcers (VLUs), burn wounds and thin-skin graft donor sites.

Material and Methods: Literature search by accessing online databases. The search, focusing on the past ten years, aimed to identify studies related to wound healing and the use of Acellular Fish Dermal Matrix (AFDM) for tissue regeneration. The selection process adhered to specific eligibility criteria, prioritising studies that reported on reepithelialisation duration and wound surface area reduction using AFDM.

Results: Findings consistently showed FSG's superior efficacy in improving wound healing, with significant increases in closure rates and reductions in reepithelialisation times across different wound types. Outcomes measured included wound closure rates, time to complete reepithelialisation and wound surface area reduction, with follow-up periods ranging from six to twelve weeks for clinical trials and up to 28 days for preclinical studies.

Conclusion: Acellular fish skin grafts offer a promising wound management alternative, providing significant healing speed and efficacy benefits, likely due to their omega-3-rich composition. Despite their potential, variations in effectiveness underscore the need for further research to fully understand FSG's healing mechanisms and optimise their clinical application. This suggests integrating FSGs into broader clinical practice while acknowledging the necessity for ongoing investigation.

Biography

Dr. Lucas Guimaraes Carelli is an unaccredited surgical trainee attached to the Sydney Local Health District Surgical Skills Network and graduated MD from Saint Petersburg State Medical University in 2017.



Lucas G Carelli*, Phaethon Karagiannis, Pratik Rastogi

Royal Prince Alfred Hospital, Sydney, Australia

Tongue ischemia post filler injection: A case report and literature review

Hyaluronic Acid (HA) fillers, though popular and generally safe for facial rejuvenation, can lead to severe complications such as vascular occlusion, resulting in skin necrosis, vision loss and even strokes. Effective treatments include the use of hyaluronidase to dissolve the fillers, Hyperbaric Oxygen Therapy (HBOT) to enhance tissue oxygenation and the application of emergency management algorithms for prompt intervention. Recent studies emphasise early recognition, structured treatment and understanding facial vascular anatomy is crucial for preventing and managing these complications, ensuring better patient outcomes.

Case Report: A 31-year-old female with no significant past medical history presented with ischemic changes in the skin and the right side of the tongue after chin augmentation with HA. These changes were characterized by pallor and decreased perfusion in the affected areas. Hyaluronidase promptly was initiated; however, the ischemic changes did not ameliorate. Computer Tomography angiogram demonstrated a patent right lingual artery, ruling out complete arterial occlusion as the cause of ischemia.

Given the potential risk of airway compromise due to swelling and the need for close monitoring of the ischemic changes, the decision was made to admit the patient for overnight observation. During the stay, the patient's condition remained stable, with no progression of ischemic changes or airway compromise.

The patient was discharged the following day with instructions for close follow-up with her cosmetic doctors. The plan included further administration of hyaluronidase to address any residual filler material and to mitigate the ischemic changes.



Conclusion: Tongue ischemia post HA filler injection is a rare but serious complication. Knowledge of facial vascular anatomy, cautious injection practices and immediate management of ischemic events are essential to minimize risks. Continuous research and education are imperative for enhancing patient safety in cosmetic surgery.

Biography

Dr. Lucas Guimaraes Carelli is an unaccredited surgical trainee attached to the Sydney Local Health District Surgical Skills Network and graduated MD from Saint Petersburg State Medical University in 2017.



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Biological skin tissue engineering

Introduction: The realm of biological skin tissue engineering has made significant strides in developing skin substitutes using biological materials. These advancements aim to closely mimic human native tissue in terms of structure, function and integration within the host environment. This report delineates the categorisation of biological skin substitutes into natural, constructed and cultured skin tissue engineering, underlining their potential treatment of various skin conditions.

Methods: The report adopts a comprehensive approach, examining various biological skin substitutes derived from allogeneic, xenogeneic and autologous sources.

Results: Biological skin substitutes exhibit various material combinations and formulations. Allogeneic and xenogeneic tissues, despite their advantages, face challenges related to availability, risk of disease transmission and immunological reactions. Autologous materials offer the closest resemblance to natural tissue but are limited by availability and patient conditions. Innovations in de-cellularization techniques and scaffold fabrication have enhanced the performance and biocompatibility of skin substitutes.

Conclusions: The development of biological skin substitutes represents a significant advancement in regenerative medicine, offering new avenues for treating complex skin injuries. While these substitutes provide promising alternatives to traditional skin grafts, challenges such as optimising tissue integration, scaling production and addressing immunogenicity remain. Future research should focus on refining processing methods, enhancing scaffold design and developing more effective strategies for cell sourcing and engineering to improve the efficacy and accessibility of skin substitutes.

Advances in Biological Skin Tissue Engineering: An Overview: Biological skin tissue engineering is at the vanguard of regenerative medicine, focusing on the development of skin substitutes that closely mimic the properties and functions of native human tissue. This field has made significant strides in creating skin replacements derived from allogeneic, xenogeneic and autologous sources, which offer substantial improvements over traditional skin grafts. The core objective is to fabricate products that not only replicate the structural and functional characteristics of natural skin but also seamlessly integrate with the host's biological environment. By leveraging the capabilities of natural, constructed and cell-based skin substitutes, this discipline is poised to revolutionize treatment outcomes for patients with a wide array of wound care requirements.

Natural Products and Decellularization Techniques: Natural tissue-engineered products are subjected to advanced decellularization techniques aimed at eliminating immunogenic components while preserving the Extracellular Matrix (ECM), which is crucial for cell adhesion and tissue development. Over the

years, methods such as freeze-thaw cycles, enzymatic treatments and mechanical agitation have been refined to create optimal scaffolds that facilitate the repopulation of host cells, thereby promoting tissue regeneration. A notable example is AlloDerm®, which uses aseptic procedures with buffered salt solutions for decellularization, demonstrating the effectiveness of these techniques in producing scaffolds that support robust tissue integration.

Constructed Devices and Scaffold Fabrication: Constructed biological products, including the Integra® Dermal Regeneration Template and MatriDerm®, represent significant advancements in skin tissue engineering[2, 3]. These devices are typically crafted from biocompatible materials like collagen and elastin hydrolysate and undergo processes such as cross-linking to improve mechanical stability and reduce degradation rates. Techniques like lyophilization and electrospinning are pivotal in replicating the ECM of the skin, providing an ideal environment for cellular growth and tissue repair. The incorporation of cross-linking techniques and antimicrobials further enhances the clinical applicability of these scaffolds, highlighting the technical advancements in the construction of durable and effective skin substitutes.

Cell-based Engineering: Cultured and Point-of-Care Sources: Cell-based tissue engineering, exemplified by products such as Epicel® and Recell®, employs both autologous and allogeneic cell sources through cultured and point-of-care methodologies. Epicel® utilizes cultured keratinocytes to generate cell sheets for application on extensive burn wounds, illustrating the potential of bioreactor systems in cell proliferation and scaffold seeding. In contrast, Recell® adopts a point-of-care approach, wherein cells are harvested, processed and applied to wounds directly in a surgical setting, demonstrating the adaptability and immediacy of cell-based therapies in real-time wound care scenarios.

Conclusion: Biological skin tissue engineering is a cornerstone of regenerative medicine, offering promising avenues for the treatment and regeneration of damaged skin. The continuous development of natural and constructed skin products, coupled with advancements in cell-based therapies, has the potential to significantly enhance clinical outcomes. The future of this field relies on the integration of multidisciplinary research, clinical expertise and technological innovation, which will undoubtedly lead to groundbreaking discoveries and improvements in patient care and quality of life.

Biography

Dr. Lucas Guimaraes Carelli is an unaccredited surgical trainee attached to the Sydney Local Health District Surgical Skills Network and graduated MD from Saint Petersburg State Medical University in 2017.



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Dermal matrixes market availability

Skin substitutes are a relevant complement in treating a wide range of skin injuries and conditions, including burns, chronic wounds and surgical reconstructions. The availability and diversity of skin substitutes in the market have grown significantly, reflecting advancements in biotechnology and materials science. This synthesises information from reports available in the literature.

Methods: A literature review focused on product specifications, regulatory approvals and market analysis to compile an overview of available skin substitute products.

Results: The market for skin substitutes is diverse, comprising products like autografts, allografts, xenografts, bioengineered tissues and synthetic membranes. At least more than seventy products have been identified in the American market. These products vary significantly in composition, complexity and clinical utility. Autologous skin grafts remain the gold standard for many applications. Still, bioengineered and synthetic substitutes offer advantages in availability, reduced donor site morbidity and specialised functionalities (e.g., infection resistance and enhanced healing). The report highlights key products in each category, noting their regulatory status, clinical outcomes and market penetration.

Conclusions: The availability of skin substitutes has expanded the toolkit for treating complex skin injuries and disorders, offering tailored solutions that improve patient outcomes. However, challenges remain in optimising product selection for specific clinical scenarios, managing costs and addressing regulatory hurdles. Continued research and innovation are essential to develop next-generation skin substitutes with improved integration, functionality and accessibility.

Biography

Dr. Lucas Guimaraes Carelli is an unaccredited surgical trainee attached to the Sydney Local Health District Surgical Skills Network and graduated MD from Saint Petersburg State Medical University in 2017.

Mi Hu

Chongqing Jiangbei Hospital of Traditional Chinese Medicine, China

Associations between proteinuria severity and pregnancy outcomes in patients with preeclampsia

Background: The kidneys are frequently affected in pregnant women with preeclampsia. We aimed to evaluate whether proteinuria could serve as a predictor for adverse pregnancy outcomes.

Methods: Clinical data from 151 pregnant women with preeclampsia diagnosed between March 2022 and July 2023 at >>> hospital were retrospectively collected and analyzed. Patients were divided into 3 groups based on the amount of 24-hour proteinuria: no proteinuria group ($<0.3\text{g}/24\text{h}$, $n=37$), mild to moderate proteinuria group ($0.3\text{-}3.5\text{g}/24\text{h}$, $n=72$) and massive proteinuria group ($>3.5\text{g}/24\text{h}$, $n=42$). Adverse pregnancy outcomes assessed included low birth weight, intrauterine growth restriction, transfer to the neonatal intensive care unit and maternal mortality.

Results: The 3 groups showed no significant differences in terms of demographics and socioeconomic status. The massive proteinuria group presented with preeclampsia at an earlier gestational week than the no proteinuria group and the mild to moderate proteinuria group ($P<0.001$). The 3 groups showed no statistical significance with regard to eclampsia rate ($7/42$ vs $10/72$ vs $4/37$, $P=0.75$) and maternal mortality rate ($1/42$ vs $0/72$ vs $0/37$, $P=0.27$). However, the rates of low birth weight ($23/42$ vs $13/72$ vs $3/37$, $P<0.001$), intrauterine growth restriction ($17/42$ vs $15/72$ vs $6/37$, $P=0.02$) and transfer to the neonatal intensive care unit ($26/42$ vs $19/72$ vs $8/37$, $P<0.001$) were significantly higher in the massive proteinuria group compared to the no proteinuria group and the mild to moderate proteinuria group.

Conclusion: A higher proteinuria is associated with adverse pregnancy outcomes of low birth weight, intrauterine growth restriction and transfer to the neonatal intensive care unit in pregnant women with eclampsia.

Ming Li

Chongqing University Three Gorges Hospital, China

Efficacy and side effects monitoring of lidocaine microsphere formulation in pediatric epidural block Chongqing University Three Gorges Hospital

Objective: To evaluate the clinical efficacy and safety of a new lidocaine microsphere formulation for pediatric epidural anesthesia.

Methods: 70 pediatric patients undergoing lower abdominal or lower limb surgeries. Patients were randomly assigned to receive either the experimental lidocaine microsphere formulation (treatment group, n=35) or a standard lidocaine solution (control group, n=35). The primary efficacy measures included the onset of anesthesia, duration of anesthesia and pain levels post-operation measured using the Visual Analog Scale (VAS). Secondary outcomes were side effects such as hypotension, respiratory depression, nausea, vomiting and local reactions like erythema or swelling. Monitoring occurred at 30 minutes, 1 hour, 6 hours and 24 hours post-operatively.

Results: 1) Onset of Anesthesia: Both groups achieved rapid onset, with the treatment group at 3.2 ± 0.5 minutes and the control group at 3.1 ± 0.6 minutes ($P>0.05$). 2) Duration of Anesthesia: The treatment group showed a significantly longer duration of anesthesia (132 ± 25 minutes) compared to the control group (95 ± 20 minutes, $P<0.01$). 3) Post-operative Pain: The treatment group reported lower pain scores at 6 hours post-operation (VAS score 2.1 ± 1.0) compared to the control group (VAS score 4.3 ± 1.5 , $P<0.01$). 4) Side Effects: Minor side effects were noted. Hypotension occurred in 5.7% of the treatment group and 4.3% of the control group; respiratory depression was observed in 2.9% and 1.4% respectively. Nausea and vomiting were comparable between groups (8.6% in the treatment vs. 10% in the control). Local reactions such as erythema occurred in less than 5% of patients in both groups, with no significant difference.

Conclusion: The lidocaine microsphere formulation provides effective and prolonged epidural anesthesia in pediatric patients with significantly reduced post-operative pain and without an increase in serious adverse effects. It presents a viable alternative to traditional lidocaine solutions, potentially improving patient comfort and satisfaction in pediatric surgical procedures.

Keywords: Pediatric Anesthesia, Epidural Block, Lidocaine Microsphere, Extended Pain Relief, Clinical Safety.



Nicolas M. Mas D Alessandro, Justin Jones

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Successful anesthesia management with intrathecal catheter for a hip replacement in a patient with recent I3 thrombosis, severe heart failure, sleep apnea and diabetes: A case report

Intrathecal catheters are a vital component in contemporary anesthesia and pain management, allowing for highly targeted drug delivery directly into the Cerebrospinal Fluid (CSF). This approach minimizes systemic side effects and enhances the overall efficacy of the anesthetic. The use of intrathecal catheters provides several key advantages, such as maintaining stable hemodynamics, avoiding the need for airway manipulation and delivering effective pain control throughout the surgical procedure. This case report describes the successful application of an intrathecal catheter for anesthesia during a challenging hip replacement surgery in a patient with a recent L₃ thrombosis, an Ejection Fraction (EF) of 21%, sleep apnea and diabetes. The patient's complex medical history, characterized by significant comorbidities and a recent thrombotic event, presented substantial challenges for both anesthesia and surgical management. Continuous spinal anesthesia, facilitated by the intrathecal catheter, emerged as a highly valuable option for this high-risk patient, providing a safe and effective alternative to general anesthesia. The precision and effectiveness of the anesthesia delivered through the intrathecal catheter underscore the critical importance of tailored anesthesia strategies in managing patients with complex medical conditions. Overall, the use of intrathecal catheters represents a significant advancement in anesthesia and pain management, offering a reliable and effective technique for delivering care to patients undergoing various surgical procedures.

Audience Take Away Notes

- Intrathecal Catheter Use
- Case-Specific Challenges
- Advantages Over General Anesthesia
- Anesthesia Technique Adaptation

Biography

Dr. Nicolas Mario Más D Alessandro, born in Argentina on August 6, 1993, is a physician anesthesiologist currently a research fellow at MetroHealth System, Cleveland Ohio. He completed his M.D. at Favaloro University and his anesthesiology residency at Hospital Evita Pueblo. Dr. Más D Alessandro's interests include pain management and anesthesia, with a focus on peripheral nerve stimulation and postoperative care. He has presented at various conferences and is involved in multiple research projects, including studies on perioperative care and chronic pain management. He is fluent in Spanish and English.



Seunghee Cho

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Incheon, Korea

The effect of remimazolam compared to propofol on postoperative shivering in patient undergoing cesarean section under spinal anesthesia with sedation

Introduction: Shivering is known to be a frequent complication in patients undergoing surgery under neuraxial anesthesia with incidence of 40–70%. Although many pharmacological agents have been used to treat or prevent Postspinal Anesthesia Shivering (PSAS), the ideal treatment wasn't found. This study compared the effects of remimazolam with propofol on Postoperative Shivering (PS) in patients undergoing cesarean section under spinal anesthesia.

Methods: Seventy patients were allocated into one of two groups. After delivery, group A received propofol and group B received remimazolam for sedation.

Results: The incidence and severity of postoperative shivering, core body temperature and the association of PS with hypothermia, MAP, or HR in the Post-Anesthesia Care Unit (PACU) were measured. Group B had significantly lower rates of perioperative hypothermia (50.1 vs. 28.0%, $p=0.04$) and postoperative shivering (40.2 vs. 20.1%, $p=0.042$). The severity of PS was also lower in group B than in group A ($p=0.032$). Core body temperature was significantly higher in group B than in group A from 10 min after induction ($p=0.046$) to the PACU ($p=0.02$). MAP and HR were more stable in group B than in group A. In group A, the correlation between the severity of PS and the incidence of hypothermia was moderate but not significant. In group B, the correlation between PS severity and hypothermia was moderate and significant.

Discussion: PS is an important complication in hypothermic patients and is one of the most common discomforts in the Post-Anesthesia Care Unit (PACU) after receiving general anesthesia. Remimazolam showed better results than propofol in anesthesia maintenance regarding hypothermia. The mechanism of remimazolam for thermoregulation is reducing the vasoconstriction threshold to a lesser extent than propofol and had an earlier onset of vasoconstriction, resulting in superior thermoregulatory control. In addition, remimazolam showed more stable hemodynamic parameters than propofol, including MAP and HR. Consequently, if patients are at risk of hypothermia, remimazolam would be better choice than propofol for sedation.

Audience Take Away Notes

- Sedation, remimazolam, cesarean section, postoperative shivering
- The anesthesiology can concern postoperative shivering and choose proper medication for sedation
- Moreover, people can know the effect of remimazolam, new emerging medication

Biography

Dr. Cho studied medicine at the Catholic Kwandong University. After graduated, she did Intern and Resident at Incheon Saint Mary's Hospital and she is doing fellowship at same hospital.

Wang Qingsong

People's Hospital of Changshou Chongqing, China

Clinical outcome analysis of laparoscopic transperitoneal radical nephrectomy for large renal tumors

Background and Aims: Laparoscopic nephrectomy is now accepted for the treatment of large renal tumors given that it is less invasive and can significantly improve patient prognosis. The surgical approaches of laparoscopic radical nephrectomy include transperitoneal approach and retroperitoneal approach, but the efficacy of these two surgical approaches is controversial. The aim of this study was to evaluate the safety and efficacy of transperitoneal laparoscopic radical nephrectomy for large renal tumors.

Methods: This study retrospectively analyzed the clinical information of patients with large renal cancer (>7 cm) who underwent laparoscopic radical nephrectomy for renal cancer from January 2014 to December 2020 in our hospital. A total of 168 patients were included in this study, including 73 cases of transperitoneal approach (transperitoneal group, T group) and 95 cases of retroperitoneal approach (retroperitoneal group, R group). In this study, we compared the clinical and pathologic information of the patients and also performed a propensity score matching between the two groups based on the baseline information. We analyzed the perioperative recovery and postoperative C-Reactive Protein (CRP) and interleukin-1 β (IL-1 β) levels and followed up the patients.

Results: Compared with the R group, the T group had a higher proportion of patients aged >60 years ($P=0.013$), a higher proportion of males ($P=0.023$) and a higher proportion of patients with comorbidities ($P=0.034$). We performed propensity score matching and 61 pairs of patients reached the matching of basic information. There was no significant difference between the matched two groups (PR Group and PT Group) of patients in terms of operative time, time to intestinal function recovery and intraoperative blood loss. However, the postoperative time to discharge was longer for patients in the PT Group than for patients in the PR Group. Postoperative CRP and IL-1 β levels were elevated in both groups compared with preoperative levels, with no significant difference between the groups. The follow-up results showed that the mean overall survival and progression-free survival were 19.3 months and 17.0 months in the PT group and 18.1 months and 16.8 months in the PR group, respectively, with no significant difference between the two groups.

Conclusion: Transperitoneal radical resection is efficacious in the treatment of large renal tumors, with no significant difference in safety and efficacy from retroperitoneal laparoscopic radical resection and is more suitable for elderly patients or patients with complications.

Keywords: Laparoscopic, Transperitoneal, Radical Nephrectomy, Large Renal Tumors.

Biography

Wang Qingsong, male, master student, mainly engaged in urology work, has many years of clinical experience. Wang Qingsong, male, master student, mainly engaged in urology work, has many years of clinical experience.

Wang Xiaoxue

The People's Hospital of Tongliang Chongqing, China

Effects of different approaches of lidocaine on decannulation cough and postoperative pain in patients undergoing gastrectomy

Background and Purpose: Intravenous Lidocaine (IVL) used intravenously for suppression of extubation choking is different from that used as an adjunct to postoperative analgesia. This study was to investigate the effect of Single Intravenous Lidocaine Infusion (SIL) or continuous Intravenous Lidocaine Infusion (IVLI) on the choking response to extubation and the postoperative pain reduction in patients undergoing gastrectomy under general anesthesia.

Methods: A total of 60 patients undergoing elective gastrectomy under general anesthesia were enrolled in this study. The patients were randomly divided into three groups: Group C (n=20): no special treatment; Group S (n=20): SIL 1.5 mg / kg was slowly administered 5 minutes after the end of surgery; Group P (n=20): a loading dose of lidocaine 1.5mg/kg was slowly injected intravenously before anesthesia induction and IVLI 1.5 mg·kg⁻¹·h⁻¹ was given 10 minutes later until the end of surgery. All patients received intravenous inhalation combined with maintenance anesthesia, Patient-Controlled Intravenous Analgesia (PCIA) and were monitored routinely. The Heart Rate (HR), pulse oxygen Saturation (SpO₂) and Non-Invasive Blood Pressure (NIBP) of the 3 groups were recorded at 3 minutes after admission (T₀), right after Intubation (T₁), right after extubation (T₂), 6 hours after extubation (T₃). The primary outcomes were the grade of cough during extubation and the Numerical Rating Scale (NRS) of pain at 10 minutes, 30 minutes and T₃ after extubation. The secondary outcomes included HR and Mean Arterial Pressure (MAP) from T₀ to T₃, intraoperative remifentanil dosage and pumping rate, the frequency of remedial compression of the PCIA pump at 6 hours after extubation and the 40-item Quality of Recovery Scale (QORS) at 24 hours and 48 hours after surgery. In addition, time to extubation, Ramsay sedation score at awakening and adverse events at extubation such as sore throat, breath-holding, laryngospasm and incisional lacrimation, time to first exhaustion and symptoms related to toxic reaction to lidocaine were recorded.

Results: There was a statistical difference in the composition ratio of choking grade at extubation when comparing between the 3 groups (P<0.05). The incidence of choking cough during extubation was lower in group P and group S compared with group C (all P values<0.05). The MAP and HR of group P were significantly lower than those of group C and group S at the moments of T₁ and T₃ (all P values <0.05); and the MAP and HR of group S and group P were significantly lower than those of group C at the moment of T₂. The NRS scores were higher in group C compared with those of group S and group P and the differences were statistically significant (P<0.05). NRS scores were higher and the difference was statistically significant (P<0.05). There was no significant difference in remifentanil dosage among the 3 groups, but remifentanil pumping speed was slower in group P compared with group C (P<0.05). As for the 48-hour postoperative QoR-40 score and the rate of patients who did not need remedial compression of the PCIA pump within 6 hours after extubation, group P was higher than group C and there was a statistically significant difference

($P < 0.05$). There was no statistically significant difference in the 48-hour postoperative QoR-40 scores among the three groups ($P > 0.05$). There was no significant difference in the time to extubation, the time to first ventilations and Ramsay sedation scores at the time of awakening ($P > 0.05$). There was no statistical difference between the three groups in terms of extubation time, first postoperative expiration time and Ramsay sedation score at awakening ($P > 0.05$). There was no difference in the incidence of sore throat, breath-holding, laryngospasm and incision cracking at the time of extubation ($P > 0.05$).

Conclusion: IVL can effectively reduce the extubation choking grade at the time of awakening in patients undergoing colorectal cancer surgery under general anesthesia and reduce the hemodynamic fluctuation at the time of extubation. IVL can reduce the incidence of pain score and remedial analgesia in the early post-extubation period and IVLI has the same effect as SIL in suppressing extubation choking. In addition to the same effect of suppressing extubation choking, IVLI significantly reduced the intraoperative opioid pumping rate and improved the quality of postoperative recovery, but should be alert to the symptoms of local anesthetic toxicity. IVL did not significantly affect the time to extubation, time to first postoperative expiration, or the Ramsay sedation score at awakening.

Keywords: Approaches, Lidocaine, Decannulation Cough, Postoperative Pain, Gastrectomy

Biography

Wang Xiaoxue, female, was born on December 12, 1984, the attending doctor, the main research direction of different methods applied Effect of lidocaine on extubation cough and postoperative pain after gastrectomy with many years of clinical experience in anesthesia.

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Effect of clinical characteristics and treatment of perianal abscess on postoperative recurrence or anal fistula formation

Objective: To investigate the clinical characteristics, diagnosis and treatment of perianal abscess and its effect on postoperative recurrence or anal fistula.

Methods: Clinical data of patients with perianal abscess diagnosed in our hospital and undergoing surgical treatment from January 2020 to January 2023 were collected for retrospective analysis and outpatient or telephone follow-up was maintained after surgery until January 2024 to evaluate the recovery of patients within 1 year after surgery. According to whether anal fistula recurred or formed within 1 year after surgery, the patients were divided into poor and good prognosis group. The clinical data of the two groups were compared, including age, gender, preoperative blood routine, combined underlying diseases, abscess cavity scope and surgical method (abscess incision and drainage under epidural anesthesia or abscess incision and treatment) and Wexner score was used to evaluate the recovery of anal function of the patients. Logistic regression was used to analyze the risk factors affecting the prognosis of perianal abscess.

Results: A total of 125 patients were collected, including 21 patients with poor prognosis (16.8%) and 104 patients with good prognosis (83.2%). There was no significant difference between the two groups in gender, age, diabetes mellitus or not. There were significant differences between the two groups in preoperative MRI examination, surgical method, preoperative blood routine, pus space range and anatomical classification. The incidence of abnormal preoperative blood routine ($\chi^2=5.90$, $P=0.02$), high abscess space rate ($\chi^2=3.93$, $P=0.05$) and perianal subcutaneous ulcer ($\chi^2=4.49$, $P=0.03$) in the poor prognosis group was higher than that in the good prognosis group and the proportion of preoperative MRI examination ($\chi^2=5.46$, $P=0.02$) was lower than that in the good prognosis group. Logistic regression analysis showed that the range of abscess space (OR=2.018, 95%CI: 1.231-3.256) and surgical method (OR=2.209, 95%CI: 1.318-3.586) were independent factors affecting the postoperative cure of perianal abscess.

Conclusion: Detecting the range of abscess space before operation and selecting the appropriate surgical treatment is helpful for the healing of perianal abscess after operation.

Keywords: Perianal Abscess, Anal Fistula Formation, Postoperative Recurrence, Influencing Factor.

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