Early experience with the use of the tunneled indwelling pleural catheters

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Over the last seven years we have implanted one hundred twenty-five Pleurx Catheters for recurrent pleural effusions. The most common indications were pleural effusions caused by malignancies. The second most common cause was congestive heart failure. Others were placed for effusions due to cirrhosis of the liver with ascites and a variety of other conditions.

In general, this a very frail and ill cohort of patients. Their only options repeated are thoracentesis or an operative intervention such as a video assisted thoroscopic pleurodesis procedure.

Many of the patients would not tolerate a procedure like a VATS with one lung anesthesia. The majority of our patients achieve pleurodesis after several months of repeated drainages done typically three times per week at home by either visiting nurses or even family members. There have been remarkably few complications. We have found this to be an excellent palliative measure for very ill group of patients.

Biography

Charles Antinori is an attending thoracic surgeon at the Inspira Health Network in Southern New Jersey, United States. He graduated from Harvard Medical School and did his general surgery training at Columbia Presbyterian in New York City. He did his thoracic training with Dr. Michael DeBakey at Baylor in Houston, Texas USA. He spent four months doing cardiac surgery at the King Faisal Specialist Hospital in Riyadh, Saudi Arabia in 1980. He is board certified in general and thoracic surgery. He is presently a Clinical Associate Professor with the Rowan University School of Osteopathic Medicine, New Jersey USA. He is a member of numerous committees and professional societies. He has published approximately twenty articles in peer reviewed publications. He has made over twenty presentations at local, national and international meetings.

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A case series of atypical femoral fractures and management of implant failures

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Background: Bisphosphonates have been shown to reduce the risk of osteoporotic fractures. However, these can result in atypical femoral fracture (AFF) and affect fracture healing process. The current study is a case series of patients with AFF and management of implant failures.

Results: In our study from 2009 to 2018 have 22 patients with 26 atypical femoral fractures. The mean age was 75 years with 16 subtrochanteric and 10 femoral shaft fractures. There were 23 (88%) fractures on bisphosphonates for a mean of 9.8 years before the fracture. All these fractures were managed with intramedullary nails apart from one plate fixation. Six patients died of un-related causes, out of which two had bilateral fractures. The healing 16 fractures ranged from 4 to 19 months with a mean of 9.3 months. Two were lost to follow up and two patients died, these patients showed early callus formation. The Functional assessment using EQ-5D-5L system was available in 16 patients. The outcomes showed two third of these patients had none or mild pain and mobility was maintained in 85%. Four patients had implant failures; two were managed with proximal femoral replacement and third had varus osteotomy with dynamic hip screw fixation. Fourth patient with initial femoral shaft fracture later developed intracapsular neck of femur fracture which was treated with total hip arthroplasty.

Conclusion: We recommend Intramedullary nailing as first-line of treatment for both atypical femoral shaft and subtrochanteric fractures. Proximal femoral replacement is a viable salvage option with satisfactory functional outcomes.

Biography
K Kailash is currently working at University Hospital Crosshouse as specialty doctor. He has recently been successful in his postgraduate FRCS examination in Trauma and Orthopedics. Now he is working towards development of his career with special interest in Lower limb trauma and arthroplasty.

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The intra-neuroendoscopic technique (INET): A minimally invasive new method for evacuation of brain parenchyma hematomas

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Background: Minimally invasive endoscopic hematoma evacuation is widely used in the treatment of intracerebral hemorrhage. However, this technique still has room for improvement. The intra-neuroendoscopic technique (INET) is a new self-created technology, and we report its safety and efficacy in evacuating brain parenchyma hematomas by comparing it with cranial puncture and drainage operation (CPDO).

Methods: The frontal, temporal or occipital approaches were used according to the site of bleeding. The preoperative and postoperative hematoma volumes, Glasgow Coma Scale (GCS) score, Cerebral State Index (CSI), hematoma evacuation rate, operation time, complications, and 30-day mortality and Glasgow outcome scale (GOS) were retrospectively compared between the two groups.

Results: A total of 98 patients were enrolled. The evacuation rate (84±7.1% versus 51.0±8.4%, p=0.00), 7-day GCS (11.8±1.2 versus 10.4±1.5, p=0.01) and CSI (87.1±8.7 versus 80.6±10.2, p=0.02) were higher, and the 30-day mortality rate (1.9% versus 15.6%, p=0.036) was lower in the INET group. However, the operation time was longer in the INET group than in the control group (65.2±12.5 min versus 45.6±10.9 min, p=0.000). Multivariable logistic regression showed that a good medium-term outcome (GOS scores 4-5) was significantly associated with INET (odds ratio (OR) 3.514, 95% confidence interval (CI) 1.463-8.440, p=0.005), age under 65 years (OR 1.402, 95% CI, 1.041-1.888, p=0.026) and hematoma volume less than 50 ml (OR 1.974, 95% CI 1.302-2.993, p=0.001).

Conclusions: INET surgery for brain parenchyma hematoma evacuation is a safe and efficient new surgical option. This technique is minimally invasive and may be helpful in providing optimal outcomes for selected patients.

Keywords: Intra-neuroendoscopy technique (INET), Transparent sheath, Brain hematoma, Minimally invasive surgery, Outcome

Biography

Bo Du is a Program Director at Intra-neuroendoscopic techniques for the removal of intracranial hematoma, a multicenter clinical controlled study in China. He is the Chinese National Brain Defense Committee Expert, the member of the Society of Chinese Stroke, the Deputy Director of the Society of Neuroendoscopy Group and the secretary of the Emergency Medicine Branch of the Chinese Stroke Association. He did his clinical research at Harvard Medical School and he was the member of Harvard University Medical Alumni Association. He also did research and study in the University of Miami. He has published more than 20 research articles in brain injury and neuroprotection field. He has been serving as an editorial board member of Chinese Neural Tissue Engineering Research.

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Biosynthetic absorbable mesh for high risk complex ventral hernia repair: A single centre experience

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Aim: Biosynthetic mesh may represent an improvement on biologic prostheses and large pore synthetic mesh for high risk complex ventral hernia repair. This study aims to evaluate the performance of Polyglycolic acid (PGA): Trimethylene carbonate (TMC) biosynthetic mesh for reinforcement of the midline fascial closure in single-staged repair of complex ventral hernias in high risk patients.

Method: A retrospective review was undertaken. All adult patients who underwent a planned open single-staged ventral hernia repair with a single unit of PGA: TMC biosynthetic mesh between May 2013 and August 2017 were included. Data on outcome variables were recorded and quality of life (QoL) assessment undertaken by Short Form-12 (SF-12) instrument.

Result: Overall, 56 patients underwent an abdominal wall reconstruction procedure for complex ventral hernia. All meshes were placed in the retrorectus position. Some 39% underwent component separation. Majority of patients (86%, n=48) had high risk (grade 2 or 3) hernias according to Ventral Hernia Working Group classification. Overall, hernia recurrence rate was 3.6% (n=2). Post-operative surgical site infection (SSI) occurred in 27% (n=15). Median follow-up by clinical examination was 6 months (range, 4-17 months). Median telephone follow-up was 21 months (range, 4-54 months). Pre and post treatment SF-12 QoL demonstrated significant improvements in both the physical and mental components.

Conclusion: This retrospective study is the largest single centre study to report outcomes related to the use of a biosynthetic mesh in complex ventral hernia repair. Our data indicate low recurrence associated with this approach. Larger well controlled studies with longer follow-up are needed for confirmation of these findings.

Biography
Joseph Varghese was appointed as a consultant General and Upper GI surgeon in early 2006. His interests have expanded following his appointment as a Colonel in the Royal ARMY Medical Corps (RAMC). Over the last few years he has expanded his service in Abdominal Wall Reconstruction surgery. He has completed over 100 cases of reconstruction using various techniques and meshes. He has submitted various research documents to peer reviewed journals and most recently presented some of his Abdominal Wall data at the International Hernia Congress in Miami (April 2018).

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Late results of endo-venous laser ablation of saphenous veins

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High ligation and stripping of incompetent saphenous vein (SV) has been challenged by endo-venous laser ablation (EVLA). Meta-analysis of late result showed similar clinical results but different cause of recurrence on ultrasound, the data has low level of evidence due to small number of patient at late assessment, and to different method of reporting. Bush propose classifying ultrasound recurrence into neovascularization, recanalization, new reflux in collateral of the groin, perforators thigh or legs and new reflux in previously competent vein. We used this classification to review our experience with EVLA for SV incompetence and report long-term results of clinical and ultrasound data.

Results: 202 legs on 168 patients were treated with EVLA over 4 years with 84% follow-up. 90.6% were C2,9.4% c4-c6. The average initial VCSS was 4.38 (SD 1.9), 140 great SV and 24 short SV were available for clinical and ultrasound evaluation. The VCSS dropped to 1.39 (SD 1.5) Ultrasound on F/U showed: no significant finding in 36% of the cohort; while reflux in groin collateral, neovascularization and recanalization (related to the technique) were found in 23.5, 7.9%, and 5% respectively. New reflux in previously competent Short SV, thigh or leg perforator veins (progression of disease) were found in 8.6%, 16.5% and 36.5% respectively. Kaplan–Meier curve for freedom from technical failure was significantly better for Short SV than Great SV, the later kept deteriorating up to 9 years.

Classifying ultrasound results as recommended by Bush, insisting on long-term follow-up, are essential to improve patient’s expectation from EVLA.

Biography
Boutros Karam is a vascular surgeon trained at Mc-Gill and Western Ontario University in Canada in Private Practice in Montreal has special interest in Phlebology including EVLA, Foam and MOCA. Speaker at Canadian society of phlebology and Lebanese society for vascular surgery, active Member of the north American society for vascular surgery (SVS), and his name is on 17 peer reviewed publications. Joined the division of vascular surgery at the American university of Beirut in 2016 as an assistant professor of surgery, with practice dedicated to developing a varicose vein center at the AUBMC.

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Robot-assisted vascular surgery

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Objectives: The da Vinci system has been used by a variety of disciplines for laparoscopic procedures but the use of robots in vascular surgery is still relatively unknown. The feasibility of laparoscopic aortic surgery with robotic assistance has been sufficiently demonstrated. Our clinical experience with robot-assisted vascular surgery performed using the da Vinci system is herein described.

Methods: Between November 2005 and August 2017, we performed 400 robot-assisted vascular procedures. 276 patients were prospectively evaluated for occlusive diseases, 94 patients for abdominal aortic aneurysm (Fig.), 4 for a common iliac artery aneurysm, 7 for a splenic artery aneurysm, 1 for an internal mammary artery aneurysm, 6 for median arcuate ligament release, 8 for endoleak type II treatment post EVAR and 2 for renal artery reconstruction. Two cases were inoperable and 5 hybrid procedures in study were performed.

Results: 386 cases (96.5%) were successfully completed robotically, one patient’s surgery (0.25%) was discontinued during laparoscopy due to heavy aortic calcification. In 13 patients (3.2%) conversion was necessary. The thirty-day mortality rate was 0.25%, and early non-lethal postoperative complications were observed in six patients (1.5%).

Conclusions: Our experience with robot-assisted laparoscopic surgery has demonstrated the feasibility of this technique for occlusive diseases, aneurysms, endoleak II treatment post EVAR, for median arcuate ligament release and hybrid procedures.

Biography
Petr Stadler is a Professor, Head of Department of Vascular Surgery and Chief, Division of Robotic Vascular Surgery, Na Homolce Hospital in Prague, Czech Republic. Member of the Scientific Board of Na Homolce Hospital. He graduated from the Charles University Prague Medical School in Pilsen, Czech Republic in 1989. He performed his Internship and Residency in General and Vascular Surgery at the District Hospital in Jicin, Czech Republic. He obtained his certification of general surgery in 1992 and vascular surgery in 1996. Upon completion of his certifications, he relocated to Na Homolce Hospital in Prague. He was certified as a console surgeon for the da Vinci surgical system in an off-site training program conducted in August, 2005 at the University of California, Irvine. His surgical interests include: laparoscopic vascular and robot-assisted vascular surgery, thoracoabdominal aortic surgery and use of vascular allografts in the treatment of arterial graft infection. He has developed a modified technique of transperitoneo-retroperitoneal approach for laparoscopic and robotic aortoiliac surgery. He was one in the world to use the da Vinci Robotic System to treatment of common iliac artery aneurysm, abdominal aortic and aortoiliac aneurysm. He is a member of the Czech Association of Cardiovascular Surgery, the European Society for Vascular Surgery, a founding member of the International Endovascular and Laparoscopic Society and honorary member the Polish Robotic Society.

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Surgery-free procedure in orthodontics

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The daily practice of the orthodontist is to put braces and to start aligning crowded teeth, with or without extraction. This study aims to review our approach in treating a crowding, especially in the lower arch. What is the concept of the ALVEOLAR CORRIDOR? Can we expand it horizontally? What happens when we move incisors labially or lingually beyond the limits of the alveolar corridor? Is our orthodontic treatment responsible of gum recession during and especially after treatment? Finally, cases with Self-Ligating Brackets and Reproximation show that we can correct a crowding and align the teeth with a fast and a safe orthodontic treatment without the need of a surgery, pre or post treatment.

Biography
Michel Bou Chaaya received his Orthodontics degree at Pierre & Marie Curie University, his TMJ Disorders and Occlusion Specialty degree at Rene Descartes University in Paris, in 1995. He is a member of the World Federation of Orthodontists, the American Association of Orthodontists, and an Invisalign Provider. He is an international speaker since 2001, in USA, Europe and Middle East.

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Outcomes of a single surgeon series of primary total hip arthroplasty with the direct anterior approach

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We have evaluated the patients undergoing an elective total hip arthroplasty using direct anterior approach (DAA), a single surgeon experience. This is a case series of 102 consecutive patients from 2013 to 2018. The average age was of 58 years (24 to 89 years). Bilateral arthroplasties were carried out in 10 patients, out of which three were done in the same siting. The BMI was at a range of 20 to 36 with a mean of 29. Per-operative fluoroscopy was used in 32%, out of which 62% were in the early years. The estimated drop in haemoglobin was 28g/l with only 2 patients who required transfusion, both had undergoing bilateral THR. The postoperative hospital stay mean was 4 days (2 to 16 days), out of which 66% were 4 day or less. The acetabular component inclination mean was 38 degrees and anteversion of 20 degrees. There were two dislocations (1.8%), one superficial infection (0.9%), residual pain in one patient and there were no other complications.

The Oxford, UCLA and EQ-5D-5L were used to assess the outcomes. The VAS component of EQ-5D-5L recorded as mean of 82 points at 3-months and 89 at 6 months and maintained at 86 point in the long-term.

The complications recently highlighted in the literature with learning experience were avoided using an approach based on careful patient selection, avoidance of higher BMI, use of fluoroscopy if any doubt on component position. The current series ensures DAA approach to be safe using this methodical approach.

Biography
K Kailash is currently working at University Hospital Crosshouse as specialty doctor. He has recently been successful in his postgraduate FRCS examination in Trauma and Orthopedics. Now he is working towards development of his career with special interest in Lower limb trauma and arthroplasty.

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