Posters

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Comparison between mitral valve and concomitant mitral with tricuspid valve operations: A retrospective analysis

Steven T Leung
Wake Forest Baptist Medical Center, USA

Background: Differences in opinion for the treatment of tricuspid regurgitation secondary to mitral regurgitation exist. This study compares the mortality and morbidity of concomitant mitral and tricuspid valve operations to mitral valve operations alone.

Methods: Between 2004 and 2012, 153 mitral valve operations were performed. In this group, 130 patients (age, 58.2±13.6) underwent mitral valve repair only, and 23 patients (age, 70.6±7.7) underwent joint mitral and tricuspid valve repairs. The results between these two groups were compared using Pearson's chi-square and propensity score analyses.

Results: Patients undergoing combined valve operations were more elderly (ages 58.2 vs 70.6, p<0.001), and more commonly female (73.9% vs 44.6%, p=0.010). When performing Pearson chi-squared test, the combined valvular operation group had a similar operative mortality (0.0% vs 1.5%, higher incidence of prolonged ventilation (30.4% vs 11.5%, p=0.017), and higher postoperative length of stay (9.7 days vs 6.4 days, p=0.039). On the contrary, there were no statistically significant differences in major complications rate (43.5% vs 16.2%, p=0.103) or aortic cross-clamp time (114.9 min vs 119.7 min, p=0.566) between the two groups. However, due to the disparity between our two groups, propensity score analyses were also performed, which did not demonstrate any differences between outcomes measured in this study.

Conclusions: The postoperative mortality and morbidity is similar between patients undergoing mitral valve repair only and patients undergoing mitral and tricuspid valve repairs. Given the decreased quality of life from progressing tricuspid regurgitation and similar postoperative mortality and morbidity rates, a concomitant valvular procedure is a reasonable approach for selected patients with severe tricuspid regurgitation secondary to mitral valve pathology.

Speaker Biography

Steven T Leung has completed his graduation with the MBBS degree in 2013 from the University of Queensland, Australia. Since then, he has completed his internship in General Surgery at the Mayo Clinic, and his PGY-2 year at the University of Florida. He is currently a Research Fellow with the Department of Surgery at Wake Forest Baptist Health. He plans to complete his residency in General Surgery, and pursue a fellowship in Cardiothoracic Surgery.

e: sleung@wakehealth.edu

Notes:

Albendazole therapy in human lung and liver hydatid cysts: A 13-year experience

Sayyed Hossein Fattahi Massoom, Lari S M, Fattahi A S, Ahmadnia N, Rajabi M and **NaderiKalat M**
Mashhad University of Medical Sciences, Iran

Background: Cystic echinococcosis (CE) is an endemic disease in Iran. This study has aimed to report the efficacy of Albendazole therapy in patients with CE.

Method: Among 164 patients with echinococcosis, who were referred to the surgery clinic, Ghaem hospital, Mashhad University of Medical Sciences between 2001 and 2013, two were diagnosed with alveolar echinococcosis (AE) and 162 with CE; 43 of whom underwent surgery. The rest 119 patients received medical therapy by Albendazole 15 mg/kg/day for three phases. Each phase included six weeks of Albendazole therapy followed by two weeks of no medication. The patients were classified according to radiologic evaluations into four groups: Cured, improved, unchanged and worsened or relapsed.

Results: Patients who completed more phases had significantly greater chances of better response. Of the 56 patients who completed all three phases, 37 (66.1%) were cured, 15 (26.8%) improved, 4 (7.1%) remained unchanged, and none worsened or relapsed. [Odds ratio (OR):4.78, 95% confidence interval (CI): 2.95-7.74, P< .0001].

Speaker Biography

Fattahi Masoom S H has obtained his specialty in General Surgery from Mashhad University of Medical Sciences, Iran, in July 1985. He is passionate about Thoracic Surgery, he continued his Sub-Specialty in it from May 1996 to June 1998. He has attended a Thoracic Surgery specialty program in Massachusetts General Hospital, Harvard University, USA, for 6 months in 2006. To this day, he has been a Member of Iranian Medical Council since 1979 and Academic Board Member of Ghaem Hospital as a Professor, since 1985, where he operates and visits patients in Thorax Surgery Ward and Thorax Walk-In Clinic..

e: Zahra.FattahiMassoom@uoit.ca

Notes:

Failure to demonstrate the role of high risk human papilloma virus in epithelial ovarian cancer

Bibi Ghodsied Seyyedi Alavi, Nourieh Sharifi, Ali Sadeghian, Alireza Rezaei and **Hossein Shidaee**
Mashad University of Medical Sciences, Iran

Background & Aims: Ovarian cancer is one of most common causes of cancer related women's mortalities. Human papilloma virus is a known factor concerning cervical cancer but its role in causing ovarian cancer is not yet verified. A few studies also identified HPV DNA in ovarian carcinoma tissues. However, some studies did not detect HPV DNA in ovarian carcinoma tissues. In this article, we investigated the potential role of high risk HPVs in the ovarian epithelial carcinoma.

Methods: Fifty archived epithelial ovarian cancer paraffin blocks were collected. Then, 30 non-malignant ovarian blocks were used as control. These samples were histopathologically were confirmed by a pathologist and the proper blocks for DNA extraction and PCR were sorted. PCR was conducted deploying highly specific primers for high-risk types of HPV (18 and 16) according to the instructions of Manufacturer Company.

Results: High-risk oncogenic sequences were identified in 4 (5%) of the 80 studied samples. Of the 4 HPV positive cases, there was 1 case with normal tissue, 1 case of mucinous cyst adenocarcinoma, and 2 cases of serous cyst adenocarcinoma.

Conclusion: Surprisingly, our findings could not support any association between high-risk oncogenic human papilloma virus (18 and 16) and malignant ovarian epithelial cancer. Therefore, that HPV is highly unlikely to play any causal role in the pathogenesis of epithelial ovarian neoplasia.

Speaker Biography

Ghodsieh Alavi has obtained her Doctorate degree in Medical Sciences in Mashhad University of Medical Sciences in 1979. With encouragements from her mother for promoting women's health, she continued her education in Gynecology and Obstetrics specialty from 1980 to 1984 and from 1984 to 2011 she was a Faculty Member of Ghaem Hospital, Mashhad, Iran. Since 1984, she has been a Manager in Alavi Medical Clinic/Women's Cancer Clinic and since 2001 to present, she is Manager of the Gynecology Ward and Hospital Board Consultant in Bent Al-Hoda General Hospital, Mashhad, Iran.

e: Zahra.FattahiMassoom@uoit.ca

Notes:

Case of glass bottle in the rectum and management algorithm

Vikram Saini
MAMC, India

Case report begins with a 36-year-old male presented with the history of accidental introduction of glass bottle in the rectum. Multiple repeated attempts of self-removal failed at home and Civil Hospital Fatehabad and patient refer to MAMC, Agroha. Vital signs normal abdomen was soft with hard moving object felt suprapubic region. X-ray of abdomen shows the glass bottle. Per rectal examination performed after the X-ray of the abdomen revealed the base of the glass bottle. Manual removal by holding the base was not successful due to mucous coating the surface. All methods of removal in different position and with obstetrics forceps, vacuum suction tried in emergency room but failed. Patient shifted to Operation Theater and under general anesthesia glass bottle of length 16 cm was taken out by transanal route. Glass bottle having some suspicious matter in it appear to be case of smuggling some narcotic substance, object was sealed and handed over to police. Patient did not reveal anything new in history and repeatedly telling it was an accident of falling on a bottle while he was defecating outside in open field. Post removal per rectal examination and sigmoidoscopy did not reveal any colorectal injury except some minor anal tears. Post removal recovery was uneventful and patient did not have anal incontinence or perianal infection. Psychiatric opinion was taken and patient was discharged after informing police.

Discussion: Males are commonly affected. Most of case series of foreign body within the rectum are reported from Eastern Europe and uncommon in Asia. The object length varied between 6 and 16 cm, and larger objects were more prone for complications. Per rectal examination is the cornerstone in the diagnosis, but it should be performed after X-ray abdomen to prevent accidental injury to the surgeon from sharp objects. X-ray pelvis and X-ray abdomen help in locating and localizing the foreign body and rule out intestinal perforation. The lateral films of pelvis will orient whether the foreign body is high or low lying. Majority (90%) of the cases is treated by transanal retrieval. Abdominal manipulation and stabilization helps in retrieval when the bottle is slippery. Obstetric forceps or snares are only helpful in grasping the broad and slippery base with limited success. Colonoscopy removal is also reported with good success. Even with laparotomy, the aim is transanal removal and closure of perforation with diversion colostomy.

Conclusion: In the present case, 16 cm large glass bottle transanal removal was carried out under general anesthesia without any complication. Abdominal manipulation and stabilization helps in retrieval the bottle by relaxing abdominal and rectal muscle under general anesthesia.

Speaker Biography

Vikram Saini completed his MBBS from PGIMS Rohtak Haryana India. He joined MAMC Agroha India for Post-graduation in Surgery and he is currently working there. During this time period, he co-authored "Evaluation of the Epidemiological and Clinical Profile of Patients with Traumatic Brain Injury in a Rural Medical Institution: A Retrospective Study" in J Adv Med Dent Scie Res. And he also presented a poster at PGIMS Rohtak, Haryana Chapter ASI.

e: vikramsaini2006@hotmail.com

Notes:

Surgical decompression in de Quervain Tenosynovitis: A case from Nepal

Shiva Prasad Parajuli[1], Bhogendra Bahadur KC[2], Norman Lamichhane[2] and **Sabita Dhakal[3]**
[1]Kaski Model Hospital, Pokhara, Nepal
[2]Academy of Health Sciences, Pokhara, Nepal
[3]Nepali Technical Assistance Group, Nepal

De Quervain tenosynovitis is a common cause of functional impairment. Steroid injection has good result but significant numbers of cases develop resistance requiring surgical decompression. This study assesses the outcome of surgery. Symptomatic de Quervaint tenosynovitis cases resistant to conservative treatment that underwent surgical decompression and postoperative thumb immobilization using thumb spica splint cast during four and half years were analyzed. They were followed for at least three months for clinical and functional outcome. Patient demography, visual analogue score (VAS) and complications were analyzed descriptively. There were 34 cases of de Quervaint tenosynovitis, mean age 42±16 years, and female 88.2%. Treatment was successful in all cases. The mean VAS score reduced to 0.5 from 6.82, p-value <0.01. Complication occurred in one case. Reduction in VAS score was significantly better than other techniques of treatment like SCI or SCI with TSC application. We found septation in 47% and multiple APL slips in 11.8% of our 34 cases. In contrast, the cadaveric study reports anatomical variation of multiple septation of APL in 57.6% and septation of first dorsal compartment in 47% in 66 cases. 22 This indicates that the failure of treatment with corticosteroid injection may contribute to this anatomical variation and ultrasound guided injection may result in less number of resistant cases. Surgical decompression of de Quervain tenosynovitis was safe and effective in cases resistant to conservative treatment.

Speaker Biography

Shiva Prasad Parajuli is an Orthopedic surgeon practicing orthopedics and traumatology since 2007 in government and private hospitals of Nepal. He has strong knowledge and skills on managing the trauma patients in emergency for primary management and after for final management like surgeries. He has done many surgeries on trauma and orthopedics such as nailing, plating, hemiarthroplasty, soft tissue injuries, corrective osteotomies. Further, he has been actively involved in research on trauma management and Orthopedics in Nepal.

e: parajulishiva12@gmail.com

Notes:

Accepted Abstracts

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What causes rheumatoid arthritis?

Brook Demissie
St. Peter Specialized Hospital, Ethiopia

Rheumatoid arthritis is a systemic inflammatory disorder affecting many organs (skin, joints, lung and liver) but, commonly affecting in synovial fluid of joints. It affects 1% of the world population. It has no known causative factor despite the many possible theories. It is one of the causes of disability. In one hand, developed countries, because of DMRADS and 'biologics' the treatment option is expanded and the quality of life of these patients improved. On the other hand, in developing countries, like Ethiopia, the options of treatment pause on only NSAIDs and steroids. NSAIDs and steroids may decrease the progression of the inflammatory response but do not halt the inflammatory process. In Ethiopia, especially in rural areas, a lot people are affected by this disease. In addition, though the disease usually affects those with age 40-50 years, in Ethiopia, we found many patients with the age of 20–30 yrs. In Delgi Hospital, it is the 8th leading cause of hospital visit in outpatient departments in above 5 years patients and it accounts 6.59% of patients seen between March 30 and June 27, 2016 G.C. Despite the above figure, the treatment includes only NSAIDs and steroids. Most of these patients will subsequently have follow up in the hospital. The progression slows down, but after 15-20 years they eventually develop permanent disability. Introducing DMRADs and 'biologics' in developing countries like Ethiopia, may help reduce rate of disabilities, thereby saving the working population which may contribute to saving the countries economy.

e: brookdemissietekle@gmail.com

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Case series of video assisted thoracoscopic surgery for retained hemothorax in chest trauma

Sankhe Paresh, Sarangi P S, Chhabra Maninder, Chibber Puneet and **Gupteshwar Prasad**
Deen Dayal Upadhyay Hospital, New Delhi

Aims & Objective: Blunt chest trauma accounts for more than 15% of injuries in trauma. The purpose of this review was to understand the complications caused by retained hemothorax and the benefits of minimally invasive surgery for patients experiencing blunt chest trauma. Duration of hospital stay and improvement in clinical and pulmonary function test were also considered.

Method: In this study, a total 30 patients who received VATS as management of retained hemothorax post blunt trauma from January 2013 to October 2016 were retrospectively enrolled. Patient's post trauma day of operation, duration of hospital stay and clinical and PFT improvement were noted.

Discussion: In 1998, Carrillo and Richardson found that hemothorax progresses in three manners: complete spontaneous reabsorption of blood within several weeks, to fibrothorax, and empyema formation. Richardson et al., retained hemothorax is defined as residual clots at least 500 ml large, or in which at least one-third of the blood in the pleural space cannot be drained by a chest tube after 72 h. Studies have suggested that surgery should be performed within 3–10 days after the initial blunt chest trauma, and most studies suggest not delaying surgery for more than 10 days because the clotted blood may cause complications. VATS can provide excellent visualization of the pleural cavity that is more useful for evacuating the hemothorax than using additional tube thoracotomies.

Conclusion: VATS is a well-tolerated, reliable, and effective procedure that can be easily applied to manage retained haemothorax after a patient experiences blunt chest trauma with few complications. As an alternative procedure to a thoracotomy, there was significant improvement in patients who were operated within 10 days of trauma, also showed great improvement in pulmonary function test and clinical outcome, also hospital stay was also shortened.

e: sankheparesh@gmail.com

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Revision of failed hip hemiarthroplasty: Classification, management and follow-up

Elsayed Morsi, Mohamed Elsawy Habib, Adel Elseedy and **Taher Eid**
Menoufia University, Egypt

Background: Many types of failed hemiarthroplasties have been reported, but there is no classification of these failures.

Patients & Methods: Revisions of 217 cases of failed hemiarthroplasty were studied with an average follow-up of 6.2 years. Classification system based on site of problem, mode of failure, and type of revision, was introduced.

Results: In most cases, the intra-operative assessment of failure correlated with the preoperative classification (99%). At the last follow-up, there were 15/217 re-revisions; giving a success rate of 93%.

Conclusion: This classification helps in choosing the appropriate revision method, leading to acceptable results.

e: dr.elsayed.morsi@gmail.com

Breast cancer in developing countries

Abdel Hadi and **Imam Abdulrahman**
Bin Faisal University, Kingdom of Saudi Arabia

The fast pace of urbanization has affected patterns of many diseases. Breast cancer is among the diseases that gained momentum over recent years in developing countries and countries of limited resources. The increased disease burden and limited resources had raised concerns in provision of optimal care. Despite many sporadic and individual efforts, the limited early detection programs are unable to overcome the problem of delayed presentations with its incurring cost of advanced disease management. The scarcity of radiotherapy centers coupled by the unaffordable other treatment modalities further compounds the problem providing mastectomy as the only available option. Overcoming cultural and educational barriers remains the early steps of attempting to provide early detection strategies in the developing world. While the survival is continually improved in the developed world due to the advances in management, developing countries is continuously striving for more access for advanced technology aiming to improve survival. Due to the increased disease burden, the parallel package of high quality primary care services, a functioning referral system and acquiring advanced technology may provide an immediate solution for this dilemma. Introduction of advances in treatment such as Intraoperative radiotherapy in the conventional operating room set up may further promote early detection strategies leading to more breast conserving surgery.

e: mhadi@uod.edu.sa

Epidemiological aspects of adult digestive cancers at the CNHU-HKM of Cotonou (Benin) from 2011 to 2015

Jean-Léon Olory-Togbe
National University of Benin, Benin

Cancers are a major public health problem in the world. Digestive cancers are growing in Benin. Most of the affected individuals arrive at a late stage of life-threatening stage. The general objective was to describe the epidemiological aspects of adult gastrointestinal cancers at the CNHU-HKM in Cotonou. This was a retrospective descriptive study that took place over a five-year period from January 1, 2011 to December 31, 2015, in four departments of the CNHU-HKM in Cotonou. We had 226 cases of digestive cancers on the 5551 admissions, a proportion of 4.1%. The predominance was male with a sex ratio of 2:4; the mean age was 53.60 years with extremes of 17 years and 88 years. Most patients lived in urban areas. The identified risk factors were B and C viral hepatitis, alcoholism and smoking. Liver cancer (47.8%) was the most common gastrointestinal cancer followed by pancreatic cancer (18.1%). Only 8% of our patients received palliative chemotherapy and 18.6% received surgical treatment. Hospital mortality was 67.7% and one-year survival was 39.9%, two years 9.2%, and five years 2%. The incidence of digestive cancers in general and HCC is growing in our country. The fight against this scourge must include vaccination against hepatitis B, public awareness of risk factors and early consultation and access to curative care for patients. Indeed, some of our patients are informing themselves about the standards of treatment and therapeutic innovations they could benefit from and that we are often unable to offer them.

e: joloryt@gmail.com

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The use of the external fixator as an alternative to avoid the complications of the surgical treatment of articular fractures of the calcaneus

Marina Rosa Filezio, Priscilla Goes Medea de Mendonça, Stefan Wolfgang Carotta Muller, Alvaro Diego Pupa de Freitas, Danilo Lira Gianuzzi and **Paolo Buffone**
Faculdade de Medicina do ABC, Brazil

Objective: The objective of this study was to analyze the complication rates of the surgical treatment of these fractures with the use of the lateral external fixator associated with the percutaneous approach. The secondary objective is the evaluation of the clinical, functional and radiographic results of these patients.

Methods: A single-center, retrospective case study of 15 patients (17 feet) with intra-articular calcaneus fracture treated with lateral external fixator between March 2015 and July 2016. 14 were male, aged between 27 and 58 years (average of 42.5 years). According to the Sanders Classification, 1 patient was IIA, 2 IIIAB, 5 IIIAC, 4 IIIBC, and 5 cases as IV. The complication rate, the values of the Böhler and Gissane angles and the AAOFAS questionnaire were evaluated in the pre-and postoperative period.

Results: The 15 patients (17 feet) were followed between 6-12 months (average of 9 months). None of the patients evaluated showed infection, dehiscence or skin necrosis during follow-up. The Böhler angle had a preoperative angle (14.5+/-4.5º) increase to (21+/ -9º) postoperative. The Gissane angle had a decrease from (135+/-15º) in the preoperative period to (122.5+/-12.5º) in the postoperative period. The AAOFAS questionnaire showed an improvement in the score from (55.5+/-9.5) in the preoperative period to (86+/-14) in the postoperative period.

Conclusion: The use of lateral external fixator as definitive treatment of intra-articular calcaneus fractures has been shown to be safe and reliable. There was no complication rate and the clinical and radiographic results were satisfactory.

e: ma.rosa00@gmail.com

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Primary hydatid disease of pancreas

Fattahi S A, Maddah G H and **Yousefi Y**
Mashhad University of Medical Sciences, Iran

Hydatid cyst cause by a parasite is zoonoses diseases; the most common site of involvement is liver and lung. Pancreatic hydatid disease is extremely rare, with an incidence of less than 1% of cases with hydatid disease. Preoperative diagnosis may be difficult regarding the absence of typical clinical or radiological signs. We report retrospective study of cases of hydatid cysts of the pancreas from 1998 to 2013 in Mashhad University of Medical Sciences, Mashhad, Iran. From 77 patients with cyst of pancreas, we had five hydatid cysts. We report demographic data, clinical manifestation, radiological feature and therapeutic modalities. The five patients were consisted of two men and three women with an average age of 27 years old. Abdominal pain was noted in three cases and obstructive jaundice in two cases. All patients were operated. All patient had imaging modalities like ultrasound and computed tomography that showed cystic lesions in the pancreas with differential diagnosis of pancreatic pseudo cyst, cystic tumors or choledochal cysts. Total cystectomy and external drainage was performed in two cases, distal pancreatectomy in two cases and pancreatojejunostomy in one case. Hydatid cyst of the pancreas is extremely rare even in endemic countries; it should be considered in the difficult diagnosis of cystic lesions of the pancreas. CT scan could be helpful for the diagnosis. Surgery remains the treatment of choice in pancreatic hydatid cyst.

e: maddahgh@mums.ac.ir

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Prevalence and factors associated with neck, shoulder and low back pains among medical students at University Hospitals

Abdulrahman D Algarni
King Saud University, Saudi Arabia

Aim: The aim of this study is to determine the prevalence of neck, shoulder and low back pain, and factors associated with MSP among medical students at University Hospitals in central Saudi Arabia.

Method: This cross-sectional study conducted among 469 medical students enrolled at a government institution in Central Saudi Arabia, using an online self-administered questionnaire in the English language adapted from the Standardized Nordic Questionnaire.

Results: Four hundred and sixty-nine students responded to our survey. Mean age was 21.4±1.3 years. Majority were females (60.6%), all were Saudis. The prevalence of MSP (at least in one body site) was 85.3% at any time. The prevalence of MSP in the past week was 54.4% and 81.9% in the previous year. The prevalence of neck pain was 24.1% in the past week and 56.5% in the previous year. The prevalence of back pain was 40.5% in the past week and 67.0% in the previous year. The prevalence of shoulder pain was 25.6% in the past week and 45.6% in the previous year. More than half (58.6%) of the participants experienced depressive symptoms. A higher prevalence of MSP among students in the clinical years was found. MSP was correlated to a positive history of trauma but not to BMI, age, gender, frequency of exercise, caffeine and smoking.

Conclusion: MSP among Saudi medical students is high particularly among medical students in the clinical years. Students who suffer from MSP are prone to develop depressive symptoms and experience a low quality of medical students' life.

e: abdulrahmanga@gmail.com

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Genetic basis of heart valve diseases; bicuspid aortic valve and mitral valve prolapse

Rojiar Asgarian, Maryam Eslami and **Fateme Chegini**
Islamic Azad University, Iran

Morbidity and mortality are mainly rooted in valvular heart disease which is also associated with the result of congenital malformations. In fact, it is important to pay a precise attention to the fact that by the amalgamation of human being increased understanding of heart valve development and major advances in genetic technologies, and by considering the success of the Human Genome Project, heart valve diseases rooted in numerous genetic contributions have been discovered. The present paper will summarize the review of the related literature regarding the two-common familial VHDs which have the genetic basis, namely such as mitral valve prolapses and bicuspid aortic valve; it also highlights some of the recent findings that boosts our understanding of pathogenesis in such diseases. The main objective of the present paper is to meet the needs of clinicians by providing a good command of knowledge on elaborating the notion of genetic contributions as one of the main sources in valvular heart diseases.

e: r0jiar.asgarian@gmail.com

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TAVI: Alternative approaches and techniques

Rainer Moosdorf
University Hospital Marburg, Germany

Transcatheter aortic valve replacement TAVI has become a frequently used additional option for elderly and high/intermediate risk patients. The transfemoral approach is mostly preferred. Alternatively, in case of small femoral vessels, severe arterial occlusive disease or other vascular abnormalities, the transapical approach or an access via the subclavian arteries is considered. The decision is such determined by the vascular pathology. However, there are also patients with accompanying cardiac or vascular pathologies not amenable for current TAVI techniques and we were looking for alternative techniques which are determined by these patients need. One frequently seen adjunctive disease is the occlusion or severe stenosis of the carotid arteries and many of these patients have already suffered from a stroke or a TIA. So, we developed a combination of typical carotid endarterectomy, also under local anesthesia, and, during the same procedure, a transcarotid aortic valve replacement. To avoid an impairment of blood flow through the newly reconstructed neck vessel, a vascular prosthesis is connected side to side to the common carotid artery, facilitating the introduction of the sheaths and avoiding its positioning inside the native vessel. Another problem is created by concomitant heart pathologies additional to the aortic valve disease. As ischemic time matters, especially in this cohort of elderly risk patients, we still operate these patients under extracorporeal circulation and cardioplegic arrest, initially addressing the concomitant pathologies like severe coronary artery or mitral/tricuspid valve disease but finally insert transcatheter valve prosthesis directly via the ascending aorta. By this hybrid approach, a complete surgical treatment can be achieved and at the same time a significant reduction of the cross-clamp time, even compared to new suture less valves. This is also reflected by lowered mortality among these patients. We consider these examples a step towards a minimally invasive and at the same time individualized surgical therapy not primarily determined by access site or incision size but by the patient's pathologies.

e: Rainer.Moosdorf@uk-gm.de

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Functional results after transfer of the pectoralis major muscle in subscapularis tears: A literature review

Gabriel da Cunha Mendes[1], **Christiane Veratti Petrucci**[1] and **Renan Lima Monteiro**[2]
[1]Irmandade da Santa Casa de Misericórdia, Brazil
[2]Federal University of Amapá, Brazil

The aim of this study was to investigate through a literature review functional outcomes after transfer of the pectoralis major muscle in irreparable tears of the subscapularis muscle. A systematic search was performed in electronic databases (Science Direct and Pubmed), which were reviewed only for studies, who described functional results after muscle transfer. Based on retrospective facts, pre-selected 455 articles were selected and five of them met all criteria and specifications set. There was an increase in range of motion in elevation, abduction and improve function. The transfer of the pectoralis major muscle in irreparable tears of the subscapularis muscle seems to be an treatment option to improve function, however, more studies with better methodological quality with emphasis on functional outcomes are needed.

e: gabrielcunha_2@hotmail.com

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The effects of cement distribution index on refracture of adjacent segments after percutaneous vertebroplasty

Zhaozong Fu, Zhongxian Chen, Ying Qin, Zhiqiang Feng, Xiongjian Jiang, Qinghua Xie and **Yitao Liu**
Jiangmen Central Hospital, China

Objective: The objective of this study is to investigate the effects of cement distribution index on refracture of adjacent segments after percutaneous vertebroplasty.

Methods: A retrospective analysis was adopted to complete the research. 143 patients received percutaneous vertebroplasty for osteoporotic vertebral compression fracture from April 2011 to March 2014 were covered in this study. All patients were followed up for 1 year. Cases developed adjacent segment fracture (re-fracture group). The other cases were not observed new fracture (control group). After operations, X-rays were taken from all patients. Index I to V was used to describe the position and shape of cement in vertebrae, and volume-cubage index was computed based on the cement volume and vertebral cubage. Age, gender, bone mineral density, distribution index, volume-cubage index, cement leakage was evaluated in the 2 groups. Then the significant indictors were used to be in variables in Logistic regression analysis.

Results: 134 cases were followed up for 1 year at last. 18 cases (13.4%) developed adjacent vertebral fractures. BMD in re-fracture groups was lower than that of control group ($P<0.05$). While the rates of cement leakage of re-fracture group were higher than that of control group ($P<0.05$). There was significant difference in distribution index between refracture and control groups ($P<0.05$). While the differences in age, gender, cement volume and volume-cubage index were not significant between the 2 groups ($P>0.05$). Bone mineral density, cement leakage and distribution index affected on adjacent fractures by Logistic regression analysis.

Conclusion: Low bone mineral density, cement leakage and poor distribution of cement in vertebrae might be the risk factor affecting adjacent vertebral fracture after percutaneous vertebroplasty.

e: doctor1999@126.com

The role of foot orthoses and flexible flatfoot

Sarah A Curran
Cardiff School of Sport & Health Sciences- Cardiff Metropolitan University, UK

Statement of the Problem: Flexible flatfoot is reported to affect up to 23% of the adult population and is a condition treated by many health professionals with an interest in the foot and ankle. Flexible flatfoot is characterised by a reduction in the height of the medial longitudinal arch along with eversion of the rearfoot. From a functional perspective, a flexible flatfoot does not provide support and stability of the foot during the propulsive phase of stance. Failing to achieve dynamic stabilisation compromises the counteraction and influence of ground reaction forces as well as the adaption to the supporting surface.

Methodology & Theoretical Orientation: Pain and symptoms proximally to the foot, an awareness of a flexible flatfoot and reports of fatigue are the typical triggers for patients to seek advice from a health professional. Whilst non-responsive and extreme cases can be treated surgically, flexible flatfoot is typically managed conservatively, with much of the literature focused on prevention. Foot orthoses-which can range from a simple device, to a mild contoured device and a fully bespoke manufactured CAD-CAM device, are commonly used in flexible flatfoot. Although the mechanism of action of foot orthoses is continuously debated by many, it is suggested that they act to control kinematic foot function and reduce plantar pressures. However, in contrast, the therapeutic value of foot orthoses for flexible flatfoot are not well explored, and there is a need to direct studies that explore patient centred outcomes with focus on fatigue and pain.

Conclusion & Significance: Although the complexity of foot and lower limb function is acknowledged, and whilst foot orthoses for flexible flatfoot may be functionally beneficial, there is a need to focus on the therapeutic response.

e: scurran@cardiffmet.ac.uk

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Comparative study of standard median sternotomy (SMS) vs right anterolateral thoracotomy (RALT) for mitral valve replacement

Hamid Ahmad
Gov. Lady Reading Hospital, Pakista

Objective: The objective of this study is to compare the outcome in mitral valve replacement done through standard median sternotomy versus right anterolateral thoracotomy

Methodology: Retrospective study from Jan 2010 to Dec 2016 at Department of Cardiovascular Surgery, Govt. Lady Reading Hospital Peshawar, Pakistan. Total 281 cases of mitral valve replacement (MVR) done among them, 229 were operated through Standard Median Sternotomy (SMS) and 157 were operated through Right Anterolateral thoracotomy (RALT). Ethical committee approval was taken. An informed consent was taken for all patients. Age, sex, mortality, total cardiopulmonary bypass CPB time, time to establish CPB, mediastinal/chest drainage, post op blood transfusion, total hospital stay, ICU stay were analyzed and compared in the two groups. Statistical analysis done by SPSS version 17 and paired t test were applied to get p value. P value less than 0.05 was considered significant.

Results: Females were predominant in both the groups (SMS 73.03% and RALT 77.07%). Mean body surface area was 1.34-meter square. Mean age was 28.65 years in SMS and 26.42 years in RALT. There was no significant difference in mortality, cardiopulmonary bypass time, cross clamp time, ventilator time, in the two groups. There was significant difference in post op blood transfusion, chest drainage, ICU stay and in total post op hospital stay.

Conclusion: Sternum sparing mitral valve replacement can be done safely in selected cases. It gives better cosmetic results in females. RALT approach reduces hospital stay of patients and he/she can return to work early. Besides less pain, shorter skin incision and lower blood loss, it has more advantages as reduced sternal infection and sternal disruption.

e: hamid797@yahoo.com