SHA 013. Tricuspid valve surgery, short and midterm results KACC experience

Alkodami Alasal Ahmed, Rawdene Van Onslen, Sophia Tahil, Dr.Hani Najm
KACC, KAMC, NGHA, Riyadh, Saudi Arabia
E-mail address: aalassal72@yahoo.com (A.A. Ahmed)

Background: The main objective for this study was to review our experience with of tricuspid valve surgery.

Methods: Our population included 133 patients operated between 1999 and 2009 for tricuspid valve surgery isolated or concomitant with other procedures.

All patients had surgery under standard cardiopulmonary bypass conditions with TEE assessment intra- and postoperatively. Moderate and above tricuspid stenosis and/or incompetence was considered an indication for surgery. The operative technique included: Ring (Duran, Cosgrove, MC3, non standard techniques and placation, etc.) and non-ring techniques (bicuspidization, De-Vega, band, Periguard, etc.).

Tricuspid valve repair was performed in 123 patients and replacement in 10 patients (7.5%). Lone Tricuspid surgery was performed in 2 patients (1.5%) (one Ebsteinoid and one drug abuser). Concomitant mitral valve surgery was performed in 86 (65%) patients while aortic valve surgery in 32 (11%) patients. Twenty patients (15%) underwent also CABG surgery. Ten patients (7.5%) had tricuspid valve replacement (tissue prosthesis). Four patients (3%) underwent Redo TV surgery (2-repair and 2-replacement).

The follow up was conducted using echo-cardiographic assessment. The mean period of follow-up was 17.9 + 25.6 months.

Results: The mean age was 48.3 ± 15.3 years. Male gender consisted about one quarter (27%) of our population. The mean Eurscore was 8.7 ± 8.1. The mean pump time was 99.4 ± 32.9 min and the cross clamp time was 67.3 ± 19.5 min.

The intrahospital mortality consisted 6 patients (4.5%). IABP was required in 4 patients (3%) and renal impairment in 12 patients (10%). Hours of mechanical ventilation 26.6 ± 74.5 h. The intrahospital mortality was 6 (3.8%).

Conclusion: Our series showed the high likelihood of recurrent TR in patients with non standard repair techniques. The bicuspidization technique was associated with better outcome of TV surgery.

doi:10.1016/j.jsha.2011.02.014

SHA 014. Our experience of controlling diabetes in the perioperative period of patients who underwent cardiac surgery

Ibrahim Abdelaziez Emam *, Andrew Allan, Khalied Eskander, Kareddula Dhanraj, El-Sayed Farag, Yasser El-Kadi, Wael Khalaf
KFMMC, Cardiac Surgery, Dmam, Saudi Arabia
E-mail address: ibrahim7502002@hotmail.com (I.A. Emam)

Objectives: We have different protocols applied in our cardiac center for control of blood glucose (BG), we like to see which protocol can achieve our goal.

Methods: From a prospective study of 120 diabetic patients randomly assigned to either simple sliding scale or Braithwaite protocol who underwent open heart surgical procedures between 2005 and 2008. The study group included 80 patients treated with Braithwaite protocol; the control group included 40 patients treated with simple sliding scale in an attempt to maintain BG level less than 200 mg/dl.

Results: In the study group all the patients were under 200 mg/dl at the end of 48 h postoperatively, which was not achieved in the control group ($P < 0.01$). There was a significant reduction in hospital stay in the study group compared to the control group (mean in days 9.1 ± 2.3/12.3 ± 7.6) ($P < 0.001$) and also there was no wound infection compared to the control group (0/5 cases).

Conclusion: The study showed that control of DM in peri-operative period using Braithwaite regimen was of great benefit and safety.

doi:10.1016/j.jsha.2011.02.015

SHA 015. The role of the edge-to-edge repair in the surgical treatment of mitral regurgitation

Michele De Bonis
San Raffaele University Hospital, Cardiac Surgery, Milan, Italy
E-mail address: debonis.michele@hsr.it

The edge-to-edge technique was introduced in the surgical armamentarium of mitral valve repair in 1991 and has progressively been used to restore mitral competence in the setting of degenerative, post-endocarditis and functional mitral regurgitation. Appropriate indications and awareness of the important technical aspects of the procedure are prerequisites for a good outcome. The free edges of the mitral leaflets have to be approximated in correspondence of the site of the regurgitant jet in such a way that mitral regurgitation is corrected without producing stenosis. A prosthetic ring is usually implanted to stabilize the repair. Middle and long-term results are now available for degenerative mitral regurgitation (bileaflet prolapse, anterior leaflet prolapse and commissural prolapse). Of particular interest is the finding that the edge-to-edge technique for correction of anterior leaflet prolapse is providing a freedom from reoperation similar to that obtained in patients with posterior leaflet prolapse treated with quadrangular resection.

Degenerative or post-endocarditis commissural prolapse/flail of the mitral valve can be effectively corrected by this technique. In patients with functional mitral regurgitation, the use of the edge-to-edge repair, added to the undersized annuloplasty, has been associated with a significantly lower recurrence of mitral regurgitation in the follow-up compared to isolated undersized annuloplasty. Almost 20 years after its introduction, the edge-to-edge technique remains an effective and versatile method to treat mitral regurgitation. Its simplicity and reproducibility have led to its clinical application by percutaneous methods opening a new age in the fascinating field of reconstructive mitral valve surgery.

doi:10.1016/j.jsha.2011.02.016

SHA 016. Does the coronary artery endarterectomy increase the morbidity and mortality compared with isolated coronary artery bypass grafting? Single center study

Mohammed Alreshidan, Hamoud Obied, Abdulaziz Albaradai, Fahad Alghofaili, M. Alreshidan, H. Obied
Prince Salman Heart Center, King Fahad Medical City, Cardiac Surgery, Riyadh, Saudi Arabia
E-mail address: msr_555@hotmail.com (M. Alreshidan)

The incidence of coronary artery disease is on an increasing trend. With the the advancement of non surgical method to achieve myocardial revascularization the cases coming to surgical revascularization are of complex and diffuse anatomy.