21.0 min) were found between the TRI and TFI groups. The 30-day survival rate was 38% in all patients, 31% in the TRI group, and 43% in the TFI group.
Conclusion: The present study demonstrates that when performed by a skilled operator, TRI is equally feasible as TFI for patients with AMI complicated by cardiac arrest.

TCTAP A-124

A Reliable and Secure Non-pharmacological Way of Preventing Radial Artery Spasm in Transradial Intervention

Andy Wai Kwong Chan
Andy Wai Kwong Chan Heart Centre, Hong Kong, Hong Kong, China

Background: Radial artery spasm (RAS) is one of the main reasons causing failure and/or complication of trans-radial intervention (TRI). Causes of spasm include anxious/sensitive patient, small radial artery size, frequent catheter passage especially guiding catheter with relative blunt tip. RAS usually resolves with intra-arterial vasodilator, sedation and/or analgesics but sometimes persists despite all kinds of treatment. Since brachial artery spasm rarely occurs and initial entry of radial sheath with the assistance of the tapered dilator is usually easy, use of long radial sheath up to distal brachial artery should avoid RAS.
Methods: The experience of using 6F 25cm long radial sheath (St Jude Engage TR sheath) by a single operator at a single cardiac catheterization laboratory (CCL) from mid June to October 2013 was reported.
Results: There was a total of 41 coronary procedures done by the author at that CCL during that period. There were 33 coronary angiogram (CA) proceeding to percutaneous coronary intervention (PCI), 5 CA with intravascular ultrasound but not PCI, and 3 CA only. There were 30 males and 11 females, with average age of 62.7 years old and body weight of 67.6 kg. All CA or/and PCI were successfully done trans-radially using the 6F 25cm long radial sheath except in two patients in whom a 6F 10cm Terumo radial sheath was used instead due to the course of the 0.025 inch radial sheath guidewire was considered not entirely satisfactory. No switch over to trans-femoral route was needed. No RAS was noted. No injection of vasodilator/ sedation/ analgesics was needed except for one patient who had mild spasm of distal brachial artery after the 0.035 inch guidewire passing through the loop and straightening the loop at that distal bradial artery. The spasm was promptly resolved with intra-arterial 200ug nitroglycerin. At the end of the procedures, all the sheaths were successfully removed without difficulty or complication. TR bands were used for haemostasis. All patients were discharged the next morning. No major adverse cardiac event or vascular complication was noted during hospitalization and clinic follow-up within a week after procedure.
Conclusion: TRI using long radial sheath up to distal brachial artery eliminated RAS, and appeared safe. A larger scale, prospective randomized trial of long versus ordinary radial sheath in TRI may be warranted.

ORALS

Valvular Heart Disease
(TCTAP A-125 to TCTAP A-126)

TCTAP A-125

A Comparison of Post Implant Aortic Valve Gradient of Transcatheter and Surgical Tissue Valves in Symptomatic Severe Aortic Stenosis

Mohammed Salem, Robert Henderson, Kamran Baig, Ian Mitchel, S. Naik, Thomas Mathew
Nottingham University Hospital, Nottingham, United Kingdom

Background: The design and flow profile of transcatheter aortic valve (TAVI) is different from surgical prosthetic valve. We compared the post implantation echocardiographic aortic valve gradient of patients undergoing TAVI using Edwards Sapien in our institution to that of surgically implanted bioprosthetic valves (SAVR) using St Jude Epic, Hancock and Mitrflow valves during the same period.
Methods: Consecutive patients who underwent TAVI between January 2010 and May 2011 were included. Patients who underwent SAVR for native aortic stenosis (AS) were identified from our database and patients who completed at least one follow up transthoracic echocardiogram (TTE) were included for final analysis. The last performed TTE was included for analysis in both groups.
Results: Thirty six patients underwent TAVI valves between January 2010 and May 2011 and TTE data were available for 34 patients who were included for final analysis. Seventy two patients underwent SAVR with a bioprosthetic valve during the same period and TTE data were available for 30 patients who were included for final analysis. Mean age (TAVI 83.4
Conclusion: Our initial results suggest excellent early haemodynamic performance of Edwards Sapien TAVI valve compared to the commonly used surgical bio prosthetic valves. TTE gradients were lower in the TAVI group than the surgical group but this requires confirmation in a large prospective patient series. Haemodynamically non-significant aortic regurgitation was significantly more common in the TAVI group.

TCTAP A-126

Safety and Efficacy of Baloon Mitral Valvotomy in Juvenile Rheumatic Mitral Stenosis

Palamalai Arunprasath, Pakkirisamy Gobu, Satheesh Santhosh, Jayaraman Balachander
Jawaharlal Institute of Postgraduate Medical Education and Research, Pudhucherry, India

Background: Rheumatic fever and subsequent Rheumatic heart disease is still widely prevalent in many of Asian and African countries. Rheumatic heart disease causes major morbidity and mortality in younger population in such highly prevalent areas. Juvenile mitral stenosis in age group < 20 years varies uniquely from adult Rheumatic heart disease. Juvenile mitral stenosis often present with morphologically more fibrous valve tissue, severe subvalvular disease and less incidence of valve calcification. Pulmonary arterial hypertension is more common in this subgroup. Balloon Mitral valvotomy in Juvenile mitral stenosis has its own limitation due to underlying unsuitable anatomy of the mitral valve with more of subvalvular fusion and thus result in unsatisfactory outcomes. Moreover dedicated hardware for the size of this age group is not widely available. In this study we analysed the safety and efficacy of Balloon mitral valvotomy in 329 patients of Juvenile mitral stenosis.
Methods: This retrospective study analysed 329 patients of Juvenile mitral stenosis who underwent balloon mitral valvotomy in our centre from 1997 to 2011.The age group ranged from 8 to 20 years with 162 males and 167 females. All patients underwent detailed pre procedure echocardiographic assessment for suitability of balloon mitral valvotomy. Left ventricular angiography in RAO view was used to compliment subvalvular disease assessment. Balloon mitral valvotomy was done by inoue technique. Transeptal septal puncture was done with brokenborough needle assembly with fluoroscopic guidance. Detailed echocardiofram was performed immediately after the balloon dilatation . The safety of procedure is assessed by complication incurred during it. Known complications of Balloon mitral valvotomy like pericardial effusion, cardiac tamponade, Acute mitral regurgitation, arrhythmias and local vascular complications are noted. The efficacy of the procedure identified by achievement of mitral valve area > 1.5 cm2 without development of >grade 2 mitral regurgitation. Also > 50% reduction in mean left atrial pressure was used as an additional surrogate marker of successful procedure.
Results: Out of 329 patients of Juvenile mitral stenosis 94.3% of patients technically underwent the procedure completely. No sex predliction found in juvenile mitral stenosis.3.6% of patients had failed transeptal puncture due to abnormal anatomy of interatrial septum and 2.1% had subsequent failed left ventricular entry of balloon. For commisurotomy Inoue balloon was used in 80.84% of cases, cribier commisurotome device in 3.34% of cases and double balloon, Mansfield balloon and combination in fewer patients. Majority of patients had single balloon dilatation of stenotic mitral valve, while 11% had serial balloon dilatations with upsizing, for unyielding valve morphology.9.1% of patient developed acute mitral regurgitation and out of this 1.5% had severe mitral regurgitation warranting emergency mitral valve replacement. Pericardial effusion and Cardiac tamponade occurred in 2.4% of cases and was managed accordingly. Simple arrthymias noted in 0.6% and local vascular complication was encountered in 1.2% of cases. one patient had cardiac arrest during procedure who was successfully resuscitated. No mortality was reported. Overall 7.5% of cases had encountered procedure related complication.

Procedure was defined successful in 65.95% of cases with good valve area and no significant mitral regurgitation and also without any complications. Significant left atrial pressure reduction was achieved in 65% of cases and < 50% reduction in pressure was noticed in 16.7% of cases.4.86% of patients had very unyielding valve despite serial balloon dilatation.
Conclusion: Balloon mitral valvotomy is still largely used as a definitive therapy,palliative therapy and bridge to surgery in juvenile mitral stenosis.The Nature of the disease and underlying anatomy of valve grossly determine the successful outcome of the procedure in this subgroup. Balloon mitral valvotomy is definitely safe and relatively efficacious procedure in treating Juvenile mitral stenosis.