lates and prognostic significance of PH in high risk elderly patients with symptomatic severe AS undergoing transcatheter aortic valve implantation (TAVI).

Methods: TAVI was performed in 145 patients. Adequate echocardiographic estimation of baseline pulmonary artery systolic pressure was available in 115 (80%). Patients were divided into three groups according to baseline pulmonary artery pressure estimated by transthoracic echocardiogram: I: 50 mmHg. Clinical and echocardiographic follow-up was obtained at 1, 6 and 12 months after TAVI.

Results: Group I consisted of 17 patients (15%), group II 58 patients (50%) and group III 40 patients (35%). At baseline the three groups were similar in terms of age, functional status, presence of severe pulmonary disease, aortic valve area and mean gradient. Patients with severe PH (group III) were more likely to have left ventricular dysfunction (LVEF).

Conclusion: In elderly patients with severe AS treated with TAVI, severe PH is associated with more depressed left ventricular function and more severe mitral regurgitation. However, severe PH is very likely to be reversible after TAVI and it did not influence the one year survival in our study.

Tracks: Adult Cardiology.

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SHA 12. Does heart block predict abscess formation in aortic valve endocarditis?
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Objectives: Abscesses associated with infective aortic valve endocarditis, found in up to 30% of patients, may manifest as various degrees of heart block. Atrophicventricular block occurring in up to 25% of patients with paravalvular abscesses confers a poor prognosis but no studies have assessed the utility of heart block in predicting abscess formation.

Methods: The charts of 376 patients admitted with suspected infective endocarditis were retrospectively analysed. Electrocardiograms of confirmed aortic valve endocarditis were examined for cardiac conduction abnormalities to determine its correlation with abscess development. An abscess was diagnosed by transesophageal echocardiography, surgery and/or autopsy.

Results: Sixty-eight patients (mean age 48 ± 15 years) had confirmed aortic valve endocarditis with abscesses found in 19 (28%). ECG conduction abnormalities were present in 19 patients (28%) with first-degree atrophicventricular block (AVB) noted in 13 patients and third-degree AVB in five patients. The sensitivity, specificity, positive predictive value and negative predictive value of first-degree AVB to detect the abscess were 26%, 84%, 38% and 75%, respectively, and odds ratio 1.83 (95% CI: 0.51–6.53, p = 0.05), while for third-degree AVB were 21%, 98%, 80% and 76%, respectively, and odds ratio 12.8 (95% CI: 1.33–123.5, p = 0.03).

Conclusion: The utility of the ECG as a screening tool for the development of paravalvular abscess is limited by its low sensitivity. However, the finding of a new third-degree heart block in the setting of aortic valve endocarditis should prompt one to consider the presence of aortic root abscess.

Tracks: Adult Cardiology.


SHA 13. Research project total anomalous pulmonary venous connection diagnosis, management and mid-term follow up
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Objectives: Total anomalous pulmonary venous connection (TAPVC) is failure of the pulmonary venous confluence to be absorbed into the posterior wall of the left atrium. It accounts for around 1% of congenital heart diseases. If obstructed it is considered one of the cardiac surgical emergencies. Repair of TAPVC continues to be associated with significant morbidity and mortality. The aim of the study is to review our experience in the diagnosis and management of patients with TAPVC as well as the midterm outcome.

Methods: All patients underwent TAPVC repair at King Abdulaziz Cardiac Center with biventricular physiology during the period from July 2000 until July 2009 were reviewed retrospectively. The types of the TAPVC, diagnostic modalities as well as the requirement for a diagnostic modality other than echocardiography were reviewed. Patients were reviewed for the need of re-intervention and at the last follow up for evidence of pulmonary veins stenosis.

Results: During the study period, 25 patients met the inclusion criteria. All were diagnosed by echocardiography. Two patients required further evaluation by Computerized Tomographic (CT) angiography, one with infra-cardiac TAPVC and one with right lung agenesis. Diagnostic cath was done for one. and balloon atrial septostomy was done for one prior to surgery. Fourteen patients (56%) had supra-cardiac type, five (20%) had infra-cardiac type, four (16%) had cardiac type, and two (8%) had mixed type of TAPVC. Thirteen patients (52%) had obstructed TAPVC. Surgery was done at a median age of 55 days (5 days to 26 months). Mean weight was 3.9 kg (±1.3 kg). The median ventilation time was 90 h (8 h to 24 days). The median ICU stay was 6 days (1–26 days). The median follow-up period was 10 months (6 month to 6 years). No early or midterm mortality. No patient required re-intervention and at the last follow-up two patients had echocardiographic evidence of mild PV stenosis.

Conclusion: TAPVC is one of the cardiac emergencies in CHD requiring early surgical repair. Careful echocardiographic evaluation can be adequate for diagnosis. Surgical repair carries low risk of mortality.

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SHA 14. Trans-radial/trans-brachial carotid stenting safety and feasibility trial
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Objectives: Conventional carotid stenting was usually conducted via trans-femoral (TF) approach, this is sometimes not feasible, and up to date there is no study for the trans-radial and trans-brachial (TR/TB) approach for carotid stenting.

Methods: Thirty consecutive patients underwent TR/TB carotid stenting (32 procedures) were compared to 32 patients underwent TF carotid stenting (32 procedures).

Results: Left TR/TB approach were used in 24/30 (80%) patients, and left internal carotid stenting was done in 19/30 (63.3%) patients. The TR/TB patients with difficult anatomy for carotid