

were diabetics, 48% hypertensive, 48% were smokers and 27% were obese. These were not different in G1. Of G2, 164 pts (57%) only had access to pPCI compared to 56% in G1 ( $p = 0.536$ -NS). In G2, the main reasons for no pPCI was late presentation in 47% vs 53% in G1;  $P = 0.34$ -NS and 27% due to thrombolysis vs 17% in G1 ( $p = 0.11$ NS). Hospital mortality in G2 was 4% in those treated with pPCI compared to 2.3% in G1 ( $P = 0.522$ -NS). Mortality In pts who did not receive pPCI in G2 was 8% compared to 11.3% in G1 ( $p = 0.49$ -NS). Females in G2 has about 3 times higher mortality. Compared to 2010, pts treated for STEMI in the last 12 months at KACC still have same, relatively low access to pPCI due mainly to persistent pattern of late presentation and prior thrombolysis which reflect apparent lack of direct access to hospitals with pPCI facilities. This seemingly relates to both lack of public awareness and health provision factors in pPCI organizations. Hospital mortality rate for pts treated with pPCI remained low during the two era while pts who did not qualify for pPCI showed a trend towards improved survival.

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### 51. Same-day discharge after percutaneous coronary intervention

R. Gul

*Prince Sultan Cardiac Center, Qassim, Buraydah, Saudi Arabia*

Due to increasing burden of cardiovascular disease there is always problem of availability of beds in tertiary care hospitals. To manage this problem we need a strategy which shorten patients stay in the hospital. This study evaluate the safety of the same day discharge after uncomplicated PCI for patients with stable coronary artery disease who are admitted electively to day cath unit. This study sought to assess the safety of same-day discharge in patients undergoing percutaneous coronary intervention (PCI). We conducted a prospective observational study, reporting outcomes of patients discharged on the same day after elective uncomplicated PCI. Patients were admitted in day cath unit with a diagnosis of stable angina and patients for planned elective PCI. Demographic data, procedural characteristics, and adverse outcome were collected. A composite end point include: death, myocardial infarction (MI), stroke, major bleeding, target lesion revascularization and vascular complications. 77 patients were included in the study. All patients had uncomplicated PCI. Majority 90% of PCI was through radial approach. Post PCI patients were observed in day cath unit for an average time of 6 h and then were discharged. Patients were clearly instructed, in case of any adverse events to approach to ER and to consult the interventionist also the patients were follow up on phone call at 24 h and 72 h post procedure and then seen in OPD at one month. There was no death, myocardial infarction, TLR or TVR. There was no major or minor bleeding and there was no vascular complications. Same discharge after uncomplicated elective PCI in stable,

selected groups of patients with close follow up is safe and feasible, However further large RCTs are needed to confirm the safety and feasibility of the same discharge.

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### MYOCARDIAL PROTECTION, INTRAOPERATIVE MANAGEMENT, AND POSTOPERATIVE CRITICAL CARE

### 52. Early revascularization on veno-arterial ECMO for patients with cardiogenic shock post stemi

K. Alkhamees<sup>a</sup>, M. Alrefaei<sup>b</sup>, S. alnosiry<sup>c</sup>, F. Oueida<sup>d</sup>, J. najeeb<sup>e</sup>, K. Eskander<sup>d</sup>

<sup>a</sup>*Saud Al-babtain Cardiac Center, Dammam, Saudi Arabia*; <sup>b</sup>*Saud Al-babtain Cardiac Center, Cardiology, Dammam, Saudi Arabia*; <sup>c</sup>*Saud Al-babtain Cardiac Center, Anaesthesia, Dammam, Saudi Arabia*; <sup>d</sup>*Saud Al-babtain Cardiac Center, Cardiac Surgery, Dammam, Saudi Arabia*; <sup>e</sup>*Saud Al-babtain Cardiac Center, Cardiac Intervention, Dammam, Saudi Arabia*

Refractory Cardiogenic shock (CS) complicates 5–7% of cases of ST-elevation myocardial infarction (STEMI), and is a leading cause of hospital death after myocardial infarction. CS complicating acute myocardial infarction continues to have a high mortality of 60–80% despite early revascularization and adjunctive therapies. We studied the effectiveness of veno-arterial (VA) – Extracorporeal Membrane Oxygenator (ECMO) for the patients with CS post STEMI during coronary angiography at our institute. Between January 2014 to April 2015, 8 male patients who suffered from progressive severe refractory CS post STEMI underwent emergent peripheral VA-ECMO implantation while performing cardiopulmonary resuscitation during coronary angiography. 7 patients of underwent PCI, while 1 patient was not amenable to PCI or CABG. The mean duration of support was  $8.5 \pm 5.8$  days. 6 patients were successfully weaned from ECMO. While on ECMO support, 2 patients died. Mean EF after ECMO explantation was  $32.5\% \pm 10.5\%$ . The 30-day survival was 50%. Early revascularization on ECMO allows supporting hemodynamic efficiently in cardiogenic shock patients.

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### PERCUTANEOUS NON-CORONARY CARDIAC INTERVENTION (INCLUDING PERCUTANEOUS VALVES)

### 53. Bilateral ductal stenting for nonconfluent pulmonary arteries in a newborn

K. Al Dhahri<sup>a</sup>, V. Arulsevam<sup>b</sup>, D. Khaymaf<sup>a</sup>

<sup>a</sup>*Saud Al-Babtain Cardiac Centre, Pediatric Cardiology, Dammam, Saudi Arabia*; <sup>b</sup>*Saud Al-Babtain Cardiac Centre, Dammam, Saudi Arabia*

Bilateral PDA dependent pulmonary circulation with right and left pulmonary artery discontinuity is very rare. Limited data available for bilateral PDA stenting. Bilateral PDA stenting in nonconfluent pulmonary arteries is challenging procedure but can be considered as an option in the management of complex conditions like this. 12 days old Preterm (36 weeks gestation) male baby with birth weight of 2.6 kg developed respiratory distress with severe cyanosis and desaturation upto 50%. Baby was intubated and started on Prostaglandin 0.05 mcg/kg/min. His saturation improved to 80%. Echocardiogram showed complex cyanotic heart disease, Situs ambiguus, dextrocardia, complete unbalanced AV septal defect, pulmonary atresia, nonconfluent small branch pulmonary arteries supplied by the bilateral patent ductus arteriosus (PDA) from right aortic arch and all four pulmonary veins form a confluence and drain into superior vena cava (SVC) through vertical vein with no obstruction. Baby was taken up for PDA stenting. descending aortogram showed right aortic arch with vertical tortuous duct to right pulmonary artery (RPA) and another short duct with acute angle from left subclavian artery to left pulmonary artery (LPA). Both ducts stented with coronary stents. Vertical vein angiogram showed both lungs drain to a confluence and then to SVC via ascending vertical vein with no obstruction. After stenting lung perfusion improved and the baby was stable and maintained 80% saturation on room air. Bilateral PDA dependent pulmonary circulation with right and left pulmonary artery discontinuity is very rare. Our case is unique with Heterotaxy, TAPVC, Dextrocardia and double ducts. Eventhough bilateral ductal stenting is technically challenging it is successful through femoral artery approach.

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#### 54. Radiofrequency perforation of pulmonary valve and PDA stenting in a preterm neonate

D. Khaymaf<sup>a</sup>, K. Al Dhahri<sup>b</sup>, V. Arulsevam<sup>b</sup>  
<sup>a</sup>Saud Al-Babtain Cardiac Centre, Dammam, Saudi Arabia; <sup>b</sup>Saud Al-Babtain Cardiac Centre, Pediatric Cardiology, Dammam, Saudi Arabia

Transcatheter radiofrequency perforation of the pulmonary valve and PDA stenting is considered as a modality for pulmonary atresia and intact ventricular septum with mildly hypoplastic tripartate right ventricle. We present a preterm neonate who has undergone this procedure. We assume that transcatheter radiofrequency perforation of pulmonary valve and PDA stenting is a safer approach for pulmonary atresia with intact ventricular septum in preterm newborns, than surgical approach. We present 5 days old, preterm (36 weeks gestation) baby girl, with 2.2 kg. She was referred to our centre with the diagnosis of pulmonary atresia with intact ventricular septum, mildly hypoplastic tripartate right ventricle. Right ventricle angiography showed tripartate right ventricle with no sinusoids. She underwent successful radiofrequency perforation of pulmonary valve

followed by balloon dilatation. At the same time prograde PDA stenting was done. Repeat right ventricle angiography showed good right ventricular outflow tract forward flow, and descending aorta angiography showed good PDA flow supplying both pulmonary arteries. The baby was extubated on same day, and prostaglandin E1 was discontinued immediately after the procedure. The baby maintained saturation more than 80% on room air. The baby was discharged after 2 days. Our case is peculiar because to our knowledge this is the lowest weight for which radiofrequency perforation and PDA stenting is done as well as being preterm.

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#### SURGICAL REVASCULARIZATION FOR ISCHEMIC HEART DISEASE

#### 55. Coronary artery bypass graft for cardiogenic shock post STEMI patients

K. Alkhomees<sup>a</sup>, K. Eskander<sup>b</sup>, F. Oueida<sup>b</sup>, A. Attia<sup>c</sup>, S. Alnosiry<sup>d</sup>

<sup>a</sup>Saud Al-Babtain Cardiac Center, Dammam, Saudi Arabia; <sup>b</sup>Saud Al-Babtain Cardiac Center, Cardiac Surgery, Dammam, Saudi Arabia; <sup>c</sup>Saud Al-Babtain Cardiac Center, Cardiac Surgery, Dammam, Saudi Arabia;

<sup>d</sup>Saud Al-Babtain Cardiac Center, Anaesthesia, Dammam, Saudi Arabia

Cardiogenic shock (CS) complicating AMI continues to have a high mortality of 60–80% despite early revascularization and adjunctive therapies. AMI-CS complicates 5–7% of cases of STEMI and is a leading cause of hospital death AMI. We studied the outcome of CABG for AMI-CS patients. From 10-2013 to 9-2015, 24 patients with post STEMI cardiogenic shock were admitted and underwent emergency CABG. Mean pre-operative ejection fraction (EF) was  $29.7 \pm 8.4\%$ . 8 patients were on IABP pre-operatively. Operative mortality rate was 21%. Survival rate was 79% and mean follow-up of  $10.21 \pm 4.8$  months. CABG should be considered for patients with AMI complicated by cardiogenic shock when PCI can not be done.

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#### 56. Endoscopic vein graft harvest for coronary artery bypass surgery: Single center experience in Saudi Arabia

M. Algadheeb<sup>a</sup>, J. Abu Awwad<sup>b</sup>, A.F. Alzyoud<sup>b</sup>, I. Abu Alfir<sup>b</sup>, H. Alhabib<sup>c</sup>, F. Alghofaili<sup>c</sup>

<sup>a</sup>King Salman Heart Centre, Riyadh, Saudi Arabia; <sup>b</sup>King Salman Heart Centre, Cardiac Center, Riyadh, Saudi Arabia; <sup>c</sup>King Salman Heart Centre, Cardiac Surgery, Riyadh, Saudi Arabia