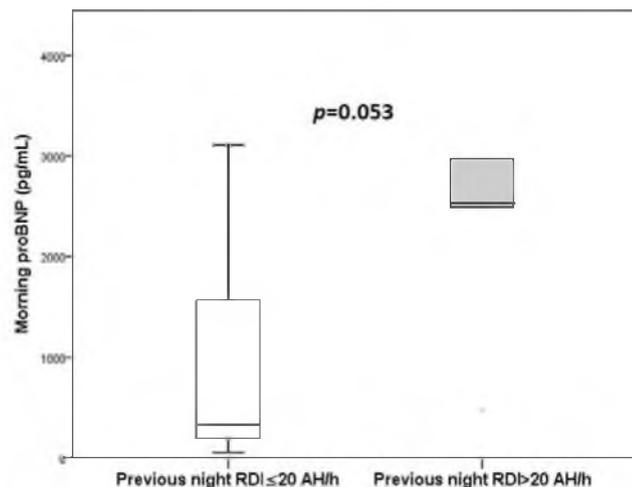


pulmonary capillary wedge pressure (PCWP) and pro B type natriuretic peptide (proBNP).

**Methods:** We conducted a prospective study of consecutive patients evaluated in a PM consultation who had a single or dual-chamber antibradycardia PM with an incorporated SAM. SAM detects and reports abnormal breathing events during the night, which can be measured as the number of apnea-hypopneas (AH) per hour: the respiratory disturbance index (RDI). We recorded data regarding: absolute number of apnea-hypopneas and RDI from the night before the consultation (defined as between 00h00 and 05h00) as well as the proportion of nights with RDI>20 AH/h since last device reset. In the morning we assessed both mitral E/e' ratio (using transthoracic echocardiogram) and proBNP. PCWP was calculated using Nagueh's formula  $(1.24 \times [E/e'] + 1.9 \text{ mmHg})$ .

**Results:** A total of 30 patients were included (mean age  $78.6 \pm 12.0$  years, 43.3% male and mean body mass index  $26.9 \pm 3.9 \text{ Kg/m}^2$ ). In the preceding night, median RDI was 8.0 AH/h (interquartile range (IQR) 5.0-21.0 AH/h). In the morning, median proBNP was 517pg/mL (IQR 223-2750pg/mL) and median PCWP was 15.9mmHg (IQR 11.8-27.0mmHg). Patients who had a higher proportion of nights with RDI>20 AH/h had significantly higher PCWP and proBNP values ( $r=0.45$  and  $r=0.61$ ,  $p=0.043$  and  $p=0.004$ , respectively). In the preceding night, a higher number of AH as well as a higher RDI were associated with elevated values of proBNP in the morning ( $r=0.70$  and  $r=0.71$ , respectively, both  $p<0.001$ ). There was a trend towards an increased PCWP in patients with higher AH and RDI in the previous night ( $p=0.093$  and  $p=0.068$ , respectively). ProBNP also tended to be superior in patients with RDI>20 AH/h in the previous night (median 2529 vs. 330pg/mL,  $p=0.053$ ) (Figure 1).

**Conclusions:** Pathologic values obtained in sleep apnea monitors available in conventional antibradycardia pacemakers correlate with elevated proBNP and PCWP values. This new tool might be useful in the evaluation of the risk of heart failure, allowing both assessment and guidance in the management of left ventricular overload.



Morning proBNP according to RDI strata

#### P1861

##### Effects of cardiac rehabilitation on exercise capacity and WHO-quality of life undergoing CABG patients- A quasi-randomised controlled trial

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The effect of home-based cardiac rehabilitation following coronary artery bypass graft surgery in a low income country: A controlled trial.

**Background:** More than 85% of global cardiovascular disease deaths occur in low and middle-income countries with coronary heart disease contributing to more than half of these deaths. Few controlled trials of cardiac rehabilitation (CR) have been conducted in low and middle income countries to date.

**Methods:** We undertook a quasi-randomized controlled trial design and allocated patients 1:1 to either based CR program in addition to usual care (CR group) or (UC group) usual care alone (UC group) according to their date of surgery. We screened all patients who were admitted to the Department of Cardiac Surgery at Ibrahim Cardiac Hospital & Research Institute (ICHR) in Bangladesh from July 2012 to July 2013. Male and female patients were included if they were admitted for elective coronary artery bypass graft (CABG) surgery aged 25 to 65 years. Patients allocated to the CR group were offered an initial CR class, and provided with an educational booklet that contained details of home-based exercise programme, and received

a monthly telephone call from a member CR team over a 12-month period. Data on exercise capacity as measured by maximal oxygen uptake (VO<sub>2</sub>max), coronary risk factors, health-related quality of life, and mental health status were collected between 3-12-months follow up. Differences in outcomes were compared between CR and UC groups in patients with complete outcome data.

**Results:** A total of 142 participants participated in the trial - 71 allocated to CR group and 71 allocated to UC group. At 12 months follow up, 61 (86%) and 40 (56%) patients respectively provided complete outcome data. VO<sub>2</sub>max at 6-months follow up was higher in the CR compared to UC group (mean difference: 7 ml/kg/min, 95% CI: 2 to 11,  $P=0.005$ ). Compared to baseline, improvements in overall and domain specific health-related on the WHO-QoL-BREF questionnaire, PHQ-9 assessed mental well-being being on PHQ-9, and CHD risk factors (body mass index, blood pressure, HbA1C, lipids) were significantly greater ( $P < 0.05$ ) for CR compared to UC group patients.

**Conclusions:** The addition of a home-based CR programme of an educational booklet supported by healthcare professional telephone calls to usual care following CABG surgery was shown to provide important patient benefits compared to usual care alone. In the context of low or middle

#### P1862

##### Staged or combined carotid endarterectomy in patients undergoing coronary artery bypass grafting

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**Background:** Ideal surgical approach for patients with hemodynamically significant carotid and coronary disease remains controversial. We analyzed our 4-year experience and compared early and long-term outcome following staged and combined carotid and coronary artery bypass.

**Purpose:** To compare the short and long-term results as well as the risk factors of both staged and combined carotid and coronary revascularization.

**Methods:** Overall 260 patients with combined carotid and coronary artery disease undergoing carotid endarterectomy and coronary artery bypass were prospectively involved in the research. First group patients were scheduled for a staged procedure (carotid endarterectomy followed by coronary artery bypass within 1 week). Patients of second group were deemed to a combined procedure (due to the unstable cardiac status). All patient data including immediate perioperative events, 30-day, and long-term outcome, demographics, risk factors were recorded and then analyzed. Patients in both groups were compared for pre- and perioperative data as well as immediate, 30-day, and long-term survival.

**Results:** First group included 148 patients and second one included 112 patients. Preoperative demographics and clinical data were similar in both groups except that preoperative cerebrovascular events were more common in the latter (31.4% versus 23.4%) and bilateral carotid disease was more common in the first group. The EuroSCORE was higher in the second group patients (2.91 versus 2.65). Carotid surgery techniques were similar; intraluminal shunting was more frequent in the second group than first one (33.33% versus 9.88%). Additional cardiac procedures in addition to coronary surgery was predominant in patients of second group. 30-day neurological adverse event rates, ICU, and hospital stay were significantly higher in the second group. The 30-day mortality was also significantly higher in the second group patients (1.96% versus 4.62%).

**Conclusion:** Staged and combined surgical manners provide truly comparable outcomes. A staged method of treatment may yield a more favorable neurological outcome with noticeably reduced need for intraluminal shunting. However, long-term outcome is similar for both approaches.

#### P1863

##### Acute aortic syndromes - What we know and what we don't know

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**Introduction:** Acute aortic syndromes (AAS) are emergent conditions, with a very high mortality in the first hours. Given this, a timely diagnosis is critical to improve prognosis. However, there are few contemporary epidemiological data.

**Objectives:** Characterization of a population of patients with AAS admitted to a tertiary hospital without cardiac surgery and identification of predictors of mortality.

**Methods:** Longitudinal analysis of patients diagnosed with AAS between 2005 and 2016. Cox regression analysis was performed to identify predictors of 30-day mortality.

**Results:** A total of 39 patients (mean age  $68 \pm 16$  years, 56.4% males) were identified. 79.5% had type A aortic dissection (AD), 15.4% type B and 5.1% were classified as non-A non-B AD. 94.7% had hypertension, 31.4% smoking habits, 24.2% dilation of the aorta and 21.2% previous manipulation of the aorta