A cohort study of early cardiologist consultation by telemedicine on the critical Non-STEMI patients
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OBJECTIVES To find out the more effective of early cardiologist consultation using a simple technology on the diagnosis and early proper management of patients with Non-STEMI at emergency department of district hospitals without cardiologist on site before transferred.

METHODS A cohort study was performed in Udonthani general hospital at Udonthani province. From 1 October 2012 - 30 September 2013 with 892 patients diagnosed with Non-STEMI. All patients mean aged 46.8 years of age who had been transferred because of Non-STEMI diagnosed, over a 12 week period of studied. Patients whose transferred, in addition to receiving proper care, were offered a cardiologist consultation with average time to Udonthani hospital 1.5 hour. The main outcome measure was length of hospital stay, mortality at 3 months, inpatient investigation, and transfer rate to the higher facilitated hospital were also studied.

RESULTS Hospital stay was significantly shorter for those didn’t consult cardiologist (hazard ratio 1.19; approximate 95% CI 1.00 to 1.25; p = 0.039). The 136 cases were transferred to higher facilitated hospital. No statistically significant in overall mortality between the groups (p = 0.068).

CONCLUSIONS Early cardiologist consultant can reduce length of hospital stay for patients with cardiovascular conditions outside of cardiac center. The new basic technology can apply for the safety patient.
IABP treatment in acute myocardial infarction (AMI) with or without cardiac shock from all published randomized trials (RCTs) to date.

**METHODS** To identify all RCTs of IABP therapy, public databases including MEDLINE (1966 to 2014) and EMBASE (1980 to 2014) were searched. The search was restricted to human studies and clinical trials or randomized controlled trials only. In addition, we also manually searched bibliographies of identified studies if needed. References were screened for studies that compared the use of IABP in AMI with or without cardiac shock. Data extraction was carried out independently and in duplicates.

**RESULTS** Seventeen relevant studies met the inclusion criteria and 3226 participants were enrolled in our study after in-depth review. We analyzed the impact of IABP management on short-term mortality in 14 trials (2254 patients), long-term mortality in 9 trials (1745 patients). There was no significant difference on short-term mortality (less than 30-day mortality) between IABP on AMI patients with cardiac shock and control group (RR, 0.91; 95% CI, 0.77–1.08; P = 0.293). Similar result was also observed in AMI patients without cardiac shock (RR, 0.88; 95% CI, 0.60–1.29; P = 0.279). Taken together, the short-term mortality of patients with AMI with and without cardiac shock does not differ between IABP and control group (RR, 0.90; 95% CI, 0.77–1.06; P = 0.214). Interestingly, further analysis of two subgroups in 9 studies (4 AMI patients with cardiac shock and 5 patients without cardiac shock) also demonstrated that IABP therapy was not associated with a significantly reduced risk of long-term mortality (6- and 12-month mortality) rate (RR, 0.91; 95% CI, 0.79–1.04; P = 0.352). Similar results were shown when the analyses were performed on patients with (RR, 0.95; 95% CI, 0.83–1.09; P = 0.409) or without cardiac shock (RR, 0.73; 95% CI, 0.49–1.09; P = 0.122), respectively.

**CONCLUSIONS** As far as we know, this is the first updated meta-analysis of only randomized controlled trials including IABP-SHOCK II trial. We did not observe substantial benefit from IABP use in AMI patients with or without cardiac shock in reducing the short-term and long-term mortality rate. However, AMI is not only associated with compromised cardiac contractile function, especially in patients with cardiac shock. Other than mortality, more comprehensive assessment of hemodynamic changes or laboratory inflammatory markers may serve as better end points. Therefore, future RCTs with larger numbers of patients and rigorous design are required.

**Methods**

**GW26-e0731**

**Relationship Between Myocardial Perfusion and Vascular Endothelial Function in Patients with Non-ST-Segment Elevation Acute Coronary Syndrome**

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**OBJECTIVES** Fractional flow reserve (FFR) is currently considered the gold standard for evaluating the functional significance of coronary stenosis. However, its potential benefits in real-world practice remain uncertain in China.

**METHODS** A retrospective cohort study was carried out using the EMRS database of The Second Affiliated Hospital of Zhejiang University, a tertiary and high-volume center in China. Clinical events were compared using the Cox proportional hazards model during a median follow-up of 13 months.

**RESULTS** The study cohort consisted of 366 consecutive patients referred for coronary revascularization with adjunct FFR and 366 matched controls, from 2010 to 2014. Major adverse cardiac events (death, myocardial infarction, repeated revascularization, or hospitalization for angina) at 4 years were found in 12.0% of angiography-guided patients and 4.9% in the FFR-guided group (P < 0.001). The myocardial number of implanted stents was significantly lower in FFR treated subjects (0.52 ± 0.82 stents) compared with the angiography-guided group (0.93 ± 0.96 stents) (P < 0.001). No difference in overall costs at initial hospitalization was observed between angiography-guided percutaneous coronary intervention (PCI) compared with FFR-guided PCI (US$3000, range 7393–44700) versus US$21200 (US$19100–47100) (P = 0.54). How ever, mean costs for major adverse cardiac events during follow-up were significantly reduced in the FFR-guided arm (US$1685 ± 9554 versus US$3441 ± 12873, P < 0.001).

**CONCLUSIONS** In the contemporary clinical practice, FFR-guided PCI is associated with decreased number of stents, improved clinical outcome, and reduced costs, compared with angiography-guided PCI.

**GW26-e4423**

**Analysis of the risk factors and characteristics of coronary artery disease of Han, Uygur and Kazak patients with acute myocardial infarction in Xinjiang Jiao Wang Muhuyati Cardiac Center, the First Affiliated Hospital of Xinjiang Medical university, Urumqi 830011, China

**OBJECTIVES** To discuss the risk factors and characteristics of coronary artery disease of Han, Uygur and Kazak patients with acute myocardial infarction in Xinjiang district.

**METHODS** A retrospective analysis of clinical data of 262 cases of Han patients, 166 cases of Uygur patients and 86 cases of Kazak patients was conducted, whose age, body mass index, cholesterol, uric acid, hypertension, type 2 diabetes, smoking, drinking, family history of coronary heart disease, relationship between PCI history and pathogenesis of acute myocardial infarction, and coronary artery disease characteristics were observed and compared in different groups.

**RESULTS** Between the Han and minority young patients, there were statistically significant differences in the distribution of BMI, lipoprotein a, positive family history of coronary heart disease, uric acid level, the combined aspects of smoking history (P < 0.017); there were also statistically significant differences in BMI, TC, HDL-C, LDL-C, apolipoprotein AI, positive family history of coronary heart disease between Han and Uygur patients (P < 0.017). There were statistically significant differences in the distribution of BMI, TC, HDL-C, LDL-C, apolipoprotein A1, positive family history of coronary heart disease between minority young patients and older patients (P < 0.017). There were statistically significant differences in the distribution of BMI, TC, HDL-C, LDL-C, apolipoprotein A1, positive family history of coronary heart disease distribution between minority young patients and older patients (P < 0.017). There were statistically significant differences in the distribution of BMI, TC, HDL-C, LDL-C, apolipoprotein A1, positive family history of coronary heart disease between Han and Uygur patients (P < 0.017).

**GW26-e0741**

**Fractional Flow Reserve Guided Percutaneous Coronary Intervention improves clinical outcome with reduced cost in Chinese real world practice**

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**CONCLUSIONS** In the contemporary clinical practice, FFR-guided PCI is associated with decreased number of stents, improved clinical outcome, and reduced costs, compared with angiography-guided PCI.