GW23-e0541 **PREDICTING CARDIAC RISK BY EVALUATING CORONARY ATHEROSCLEROSIS WITH CTA FOR NON-CARDIAC SURGERY**

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Chang Rui-ping, Yang Li. *PLA General Hospital*

Objectives While the coronary CT (CTA) has been used to judge coronary atherosclerosis, its value in predicting the cardiac risk before non-cardiac surgery remains controversial. The objective of the present study was to explore the role of CTA for predicting cardiac events in patients who were subject to undergo non-cardiac surgery.

Methods Eighty-nine patients (male 56, mean age 65.1) with suspected coronary heart disease (CHD) were scheduled to receive non-cardiac surgery. The luminal stenosis and calcification score were evaluated. Operative sites included chests (n=29), abdomens and pelvis (n=26), large vessels (n=3), bones and joints (n=19) and other regions (n=12).

Results In 89 patients, 75 patients (84.27%) were diagnosed as with atherosclerosis while 10 patients (11.24%) were without; 2 patients had coronary artery bypass surgery and 2 patients had implanted stents. According to the results of CTA, 12 operations (13.48%) were cancelled, and 8 (8.98%) were postponed after interventions. In practice, severe stenosis of coronary lumen had significant impact on surgery planning (p=0.004) while calcification score did not. In patients who underwent operation as scheduled, 1 had atrial fibrillation after operation.

Conclusions For patients with suspected coronary atherosclerosis, severity of coronary stenosis is a major factor that would determine whether the subject was eligible for non-cardiac surgery or not. From the view of reducing fatal cardiac events during perioperative period, CTA may provide parameters that can be used along with other risk evaluations. In this regard, further and larger-scale investigation is warranted.