curves were generated and the area under the curve (AUC) calculated.

Results At baseline, the plasma NGAL (69.4 ± 29.8 ng/ml) was correlated positively with creatinine (90.9 ± 20.4 µmol/L) \( (r^2=0.341, p<0.001) \). The plasma NGAL increased at 2 h and reached peak at 8 h and decreased at 24 h after procedures. Among all the patients, 29 patients (12.6%) developed CIAKI. The sensitivity, specificity, and ROC curve for prediction of CIN were excellent for the 2 h plasma NGAL (75%, 89%, and 0.90, respectively).

Conclusion NGAL seems to be a potential early biomarker for CIAKI.

**e0514**

**THE SAFETY AND FEASIBILITY OF REPEATED PERCUTANEOUS TRANSRADIAL CORONARY INTERVENTION IN THE SAME ROUTE**

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**Background** The radial approach has been increasingly used as an alternative to femoral access. And more procedures of repeated transradial coronary intervention (r-TRI) are performed. Few data about r-TRI has been obtained. Therefore, we tried to investigate the safety and feasibility of repeated transradial coronary intervention (r-TRI) in the same route.

**Methods** A total of 423 consecutive eligible patients undergoing repeated TRI were enrolled in r-TRI group, and 346 patients with initial TRI were assigned to i-TRI group in a 2-to-1 ratio matched by ages and gender. The primary endpoint included the success rate of procedure and incidence of vascular related complications.

**Results** The baseline clinical characteristics in two groups were comparable. The success rate of procedure in r-TRI and i-TRI was similar (96.0% vs 97.5%, \( p=0.969 \)). The success rate of procedure in r-TRI was higher than in i-TRI group (98.0% vs 97.2%, \( p=0.521 \)). The patients in i-TRI group had more comfortable feeling than in r-TRI group (less frequent and decreased at 24 h after procedures). Among all the patients, 29 patients (12.6%) developed CIAKI. The sensitivity, specificity, and ROC curve for prediction of CIN were excellent for the 2 h plasma NGAL (75%, 89%, and 0.90, respectively).

**Conclusion** NGAL seems to be a potential early biomarker for CIAKI.

**e0516**

**SAFETY AND EFFICACY OF TRANSULNAR APPROACH FOR CORONARY ANGIOGRAPHY AND INTERVENTION**

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**Background** Transradial approach, which is now widely used in coronary angiography and intervention may be advantageous with respect to the femoral access due to the lower incidence of vascular complications. Transulnar approach has been proposed for elective procedures in patients not suitable for transradial approach.

**Objective** The objective of this study was to evaluate the safety and efficacy of the transulnar approach vs the transradial approach for coronary angiography and intervention.

**Methods** 240 patients undergoing coronary angiography, followed or not by intervention, were randomised to transulnar (TUA) or transradial approach (TRA). Doppler ultrasound assessments of the forearm vessels were scheduled for all patients before procedures, 1 day and 30 days after procedures. The primary end point was access site vascular complications during hospitalisation and 30 day follow-up. MACE as secondary end point was recorded till 30 day follow-up.

**Results** Successful puncture was achieved in 98.3% (118/120) of patients in the TUA group, and in 100% (120/120) of patients in the TRA group. Coronary angiographies were performed in 76 and 83 patients in TUA and TRA group, respectively. The incidence of artery stenosis 1 day and 30 day after procedures was 11% vs 12.3% and 5.1% vs 6.6% in TUA and TRA group, respectively. Asymptomatic access site artery occlusion occurred in 5.1% vs 1.7% of patients 1 day and 30 day after transulnar angioplasty, and in 6.6% vs 4.9% of patients 1 day and 30 day after transradial angioplasty. Minor bleeding was still observed at the moment of the ultrasound assessment in 5.9% and 5.7% of patients in TUA and TRA group, respectively \( (p=0.949) \). No big forearm haematoma, and A-V fistula was observed in both groups. Freedom from MACE at 30 day follow-up was observed in all patients.

**Conclusion** The transulnar approach is as safe and effective as the transradial approach for coronary angiography and intervention. It is an attractive opinion for experienced operators who are skilled in this technique, particularly in cases of anatomic variations of the radial artery, radial artery small-calibre or thin radial pulse.