PS103
The frequency of MINS (Myocardial Injury after Noncardiac Surgery) and other postoperative complications in different age groups of elderly patients who underwent endovascular aortic repair because of abdominal aortic aneurysm

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Aim: The aim of our study was to estimate frequency of MINS and other complications after endovascular aorta repair because of AAA in different age groups.

Introduction: Nowadays, endovascular aneurysm repair (EVAR) is the most common technique for repair of abdominal aorta aneurysm (AAA). This procedure involves less complications than open surgery, nevertheless they still occurs.

Methods: The study group consisted of 143 patients (85.3% men), aged 76.8 ± 7.7 with AAA who had endovascular aneurysm repair between January 2015 and May 2017 in the Department of Vascular Surgery and Angiology. Patients were divided into two groups depending on age: group I ≤ 75 years (60 patients, aged 69.3 ± 4.5), group II > 75 yrs (83 patients, aged 82.2 ± 4.2). We considered coexistent diseases, some laboratory tests and Revised Cardiac Risk Index for Pre-Operative Risk (Lee index). Statistical analysis was performed with U Mann-Whitney and Chi2 tests.

Results: The study groups were comparable regarding the coexistent diseases and preoperative risk. Older patients had higher mean creatine level on admission than younger patients (group I: 103.29 ± 84.10 vs. group II: 118.5 ± 61.9 μmol/l, p < 0.005) and lower eGFR (80.6 ± 27.6 vs. 61.61 ± 21.9 vs. 1.73 ml/min/m², p < 0.001). The mean concentration of haemoglobin and amount of white blood cells were also lower in elderly patient (13.19 ± 1.93 vs. 12.9 ± 18.3 g/dl, p = 0.01; 8.23 ± 2.74 vs. 7.49 ± 2.7 ± 10/lμl, p = 0.04).

Frequency of some complications such as acute kidney injury, pneumonia, sepsis, stroke or intrahospital mortality were similar in both groups.

However, we observed a statistically significant difference in the frequency of MINS (26.67% vs. 45.78%; p = 0.04). Older patients also needed red blood cells concentrate transfusion after surgery more often than younger (6.67% vs. 19.28%; p = 0.03).

Conclusion: MINS is the most common complication after EVAR. Age seems to be a significant feature which increases the frequency of MINS in compared groups despite similar coexistent diseases and preoperative risk assessment determined by Lee index.1–3

References