

ABSTRACT

Background: Currently, there is no single point of view on performing simultaneous interventions in patients with combined coronary artery and carotid artery diseases. According to the meta-analysis the risk of stroke in patients with carotid artery stenosis with coronary artery bypass graft (CABG) surgery can reach up to 5%. At the same time carotid endarterectomy (CEA) in patients with coronary artery lesions may cause a heart attack in 1% of patients. The main purpose of the study was to investigate the safety and efficacy of simultaneous CEA and CABG

Methods: We report the analysis of 33 patients group who was undergo simultaneous carotid endarterectomy and coronary artery bypass grafting. Average patients age was 61±7,6 years. There were 28 (84.8%) men, 5 (15,2%) women. Asymptomatic stenosis of the ICA was observed in 29 (87,9%) patients and symptomatic in 4 (12,1%) cases. Follow up period was 30 postoperative days.

Results: During the surgery firstly was performed CEA at the same time with the harvesting of saphenous veins for grafts. Before applying the clamps to the carotid arteries Doppler monitoring was performed and a temporary shunt was not used. Second stage was coronary artery bypass grafting using cardioplegia and heart-lung machine, in addition In 4 cases with aortic valve replacement. In 69,7%, classical CEA was performed and in 30,3% eversion. In 1 case patient died because of acute left ventricle failure. Strokes and myocardial infarction within 30 days were not registered. The duration of the total surgery time was 206,8±37,9 minutes (there is no statistically significant difference with CABG alone). Average stay in intensive care unit was 2,1±0,7 days.

Conclusions: Simultaneous operations are safe and are indicated in high cardio-vascular events risk patients. CEA with CABG reduces risk of myocardial infarction and stroke during the surgery and within 30 days after it.

BACKGROUND

- there is no single point of view on performing simultaneous interventions in patients with combined coronary artery and carotid artery diseases.
- risk of stroke in patients with carotid artery stenosis with coronary artery bypass graft surgery can reach up to 5%.
- carotid endarterectomy in patients with coronary artery lesions may cause a heart attack in 1%

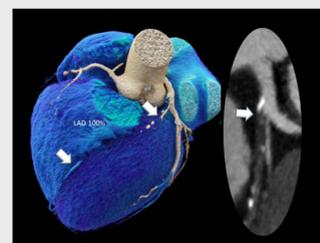
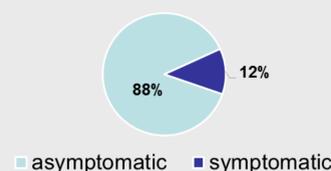
PURPOSE

The main purpose of the study was to investigate the safety and efficacy of simultaneous CEA and CABG

METHODS

33 patients, age 61±7,6

Stenosis type

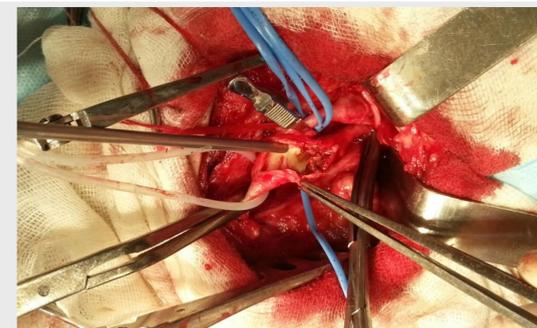


RESULTS

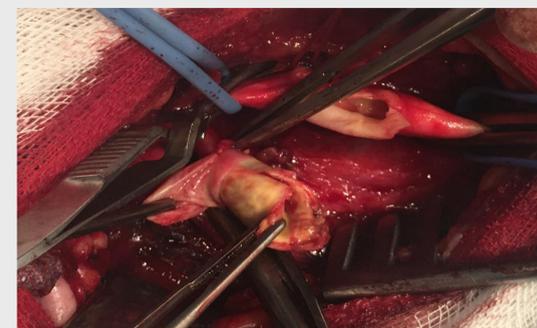
Homocystein and vitamin D levels before surgery

	CEA+CABG	CABG	p
Age (years)	59 (56-64)	59 (50-63)	0,158
Homocystein (mmol/L)	21,5 (11,43 - 45,41)	16,62 (11,19 - 29,24)	0,009
Vitami D (ng/ml)	17,84 (14,27-27,62)	23,78 (19,41-40,08)	0,008

RESULTS



Classic endarterectomy 30%



Eversion endarterectomy 70%

Firstly was performed CEA + harvesting of saphenous veins for grafts.

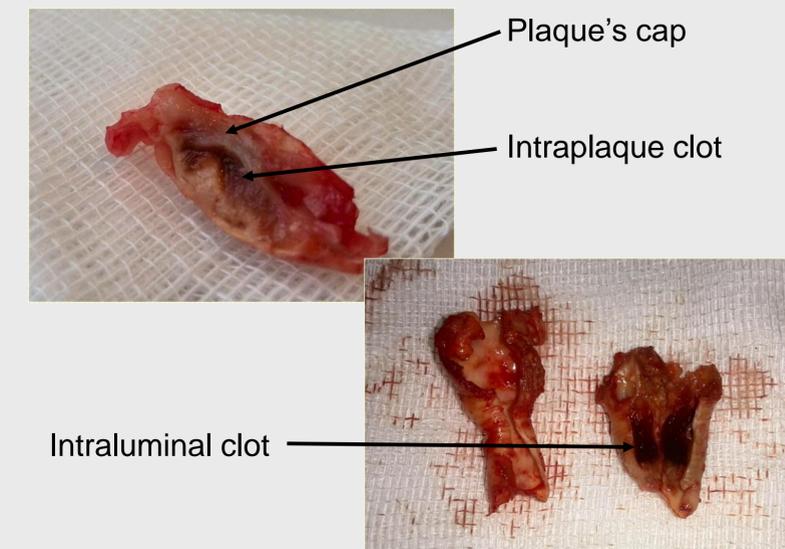
Doppler monitoring = no cases for shunt



Second stage was coronary artery bypass grafting using cardioplegia and heart-lung machine, in addition In 4 cases with aortic valve replacement.

RESULTS

- No strokes were recorded within a 30-day period
- Mortality - 1 person (3.03%) due to the development of acute left ventricular failure on the 7th day after surgery
- The average time of staying in the intensive care unit is 3.1 ± 2.42 days
- The average duration of the surgery is 296.8 ± 67.9 minutes



CONCLUSION

Simultaneous operations are safe and are indicated in high cardio-vascular events risk patients. CEA with CABG reduces risk of myocardial infarction and stroke during the surgery and within 30 days after it.

DISCLOSURES

We have no conflict of interest to report