Sixteen Years Of Experience In Performing MIDCAB Procedure

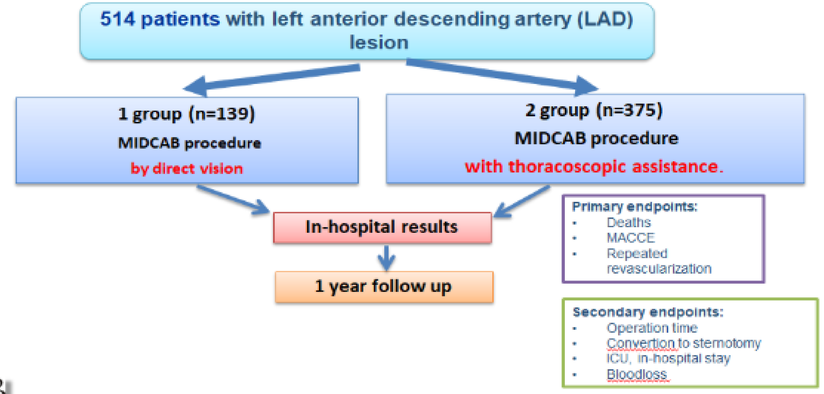
Vadim A. Popov, Kirill A. Kozirin, Maksim M. Anishchenko, Egor S. Malyshenko, Amiran Sh. Revishvili
A.V. Vishnevsky National Medical Research Center of Surgery, Moscow, Russia

Objection

To analyze results of MIDCAB procedure in patients with isolated LAD stenosis for 16 years.

Materials and methods

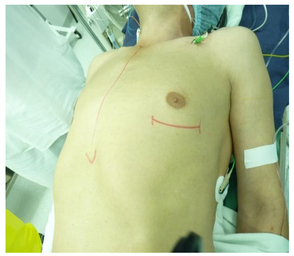
Design

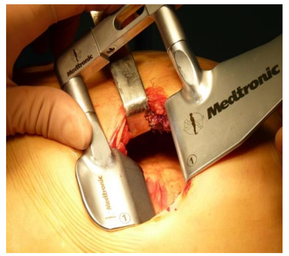


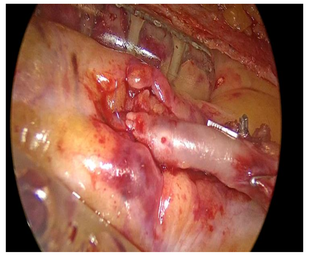
Indications for surgery were hemodynamically significant stenosis or occlusion of LAD (with high-risk or impossibility of PCI), high-grade angina, positive stress test in asymptomatic patients. Clinical characteristics in both groups had no significant differences.
In the second group thoracoscopic assistance were used to pleuroscopy, pericardioscopy and left internal mammary artery harvesting. In both group LIMA to LAD anastomosis were performed by direct vision.
Primary endpoints were cases of deaths, MACCE, repeated revascularization.
Secondary endpoints were operation time, conversion to sternotomy, ICU, in-hospital stay, bloodloss.

Clinical characteristic	MIDCAB all (n=514), %	Direct Vision (n=139), %	Thoracoscopic (n=375), %
Age, M±SD	61,3±13,8	59±11,2	62,1±10,4
Male, n (%)	360 (70)	105 (72)	255 (68)
Diabetes, n (%)	113 (22)	29 (20)	84 (22,5)
Hypertension, n (%)	401 (78)	103 (74)	298 (79,5)
PICsclerosis, n (%)	287 (56)	67 (48)	220 (58)
EF, %, M±SD	54±7,4	55±6,9	56±5,6
Stroke, n (%)	41 (8)	12 (8,6)	29 (7,7)
Smoker, n (%)	258(50)	68 (48)	190 (50,6)
EuroScore II,%, M±SD	1,7±0,76	1,81±0,83	1,6±0,97

No significant differences between groups







RESULTS

Parametrs	MIDCAB direct vision N=139	MIDCAB with thoracoscopy N=375	p
Mortality	0	0	-
MACCE	0	0	-
Wound complications	12(8,6%)	3(0,8%)	0.001
Conversion to sternotomy	8 (5,7%)	4(1%)	0.03
Operation time	181±34 min	138±26 min	0.037

There were no diffrences at primary endpoints

In 1 year follow-up we unfortunately has death an about 1 % and MACCE (5.7% vs 6.1%), but also without statistical differences.

CONCLUSION

MIDCAB with thoracoscopic assistance have better in-hospital results than MIDCAB by direct vision
We consider thoracoscopic assistance as a necessary part of MIDCAB technique