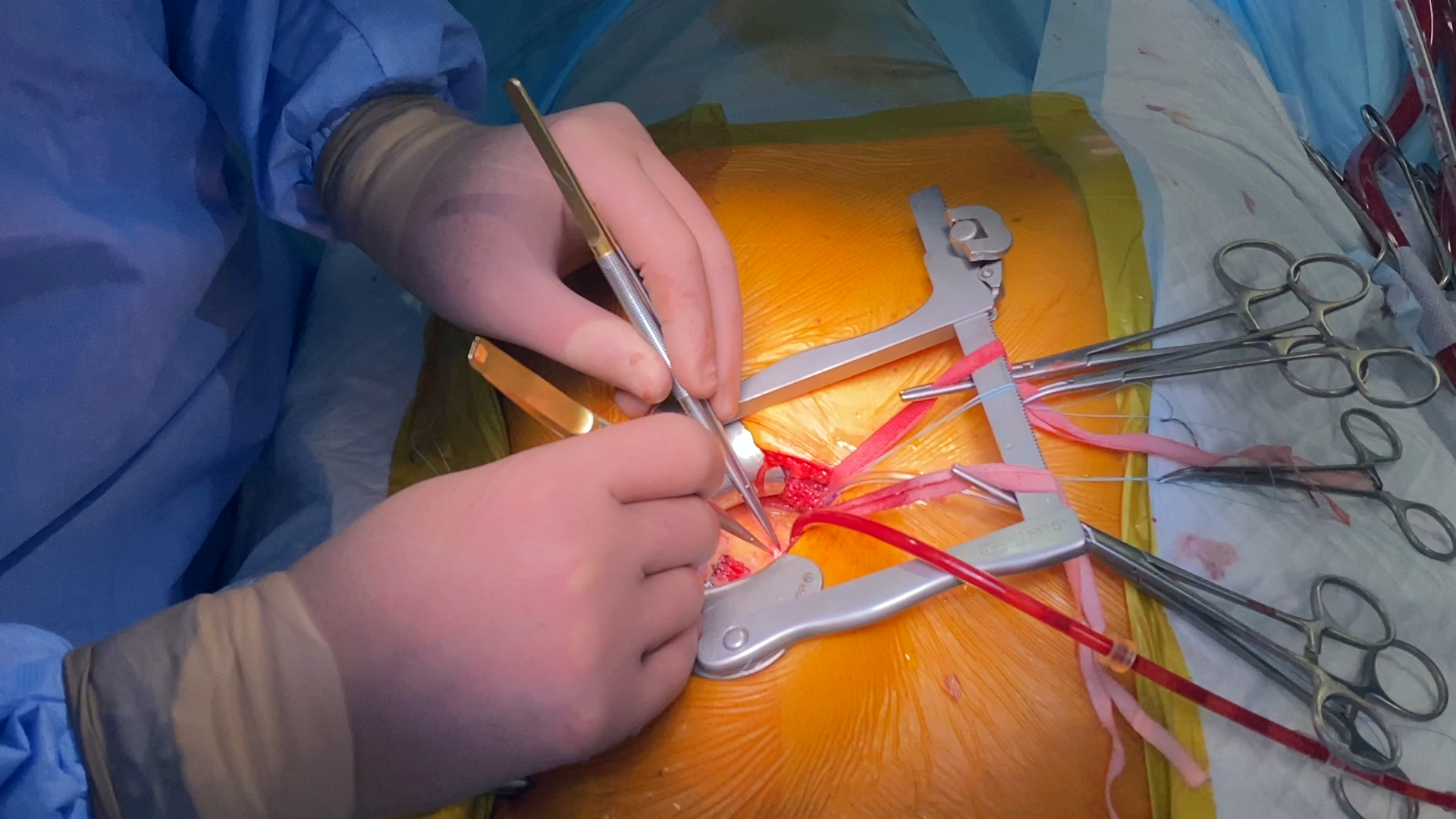


Multiple arterial graft use in minimally invasive coronary bypass surgery

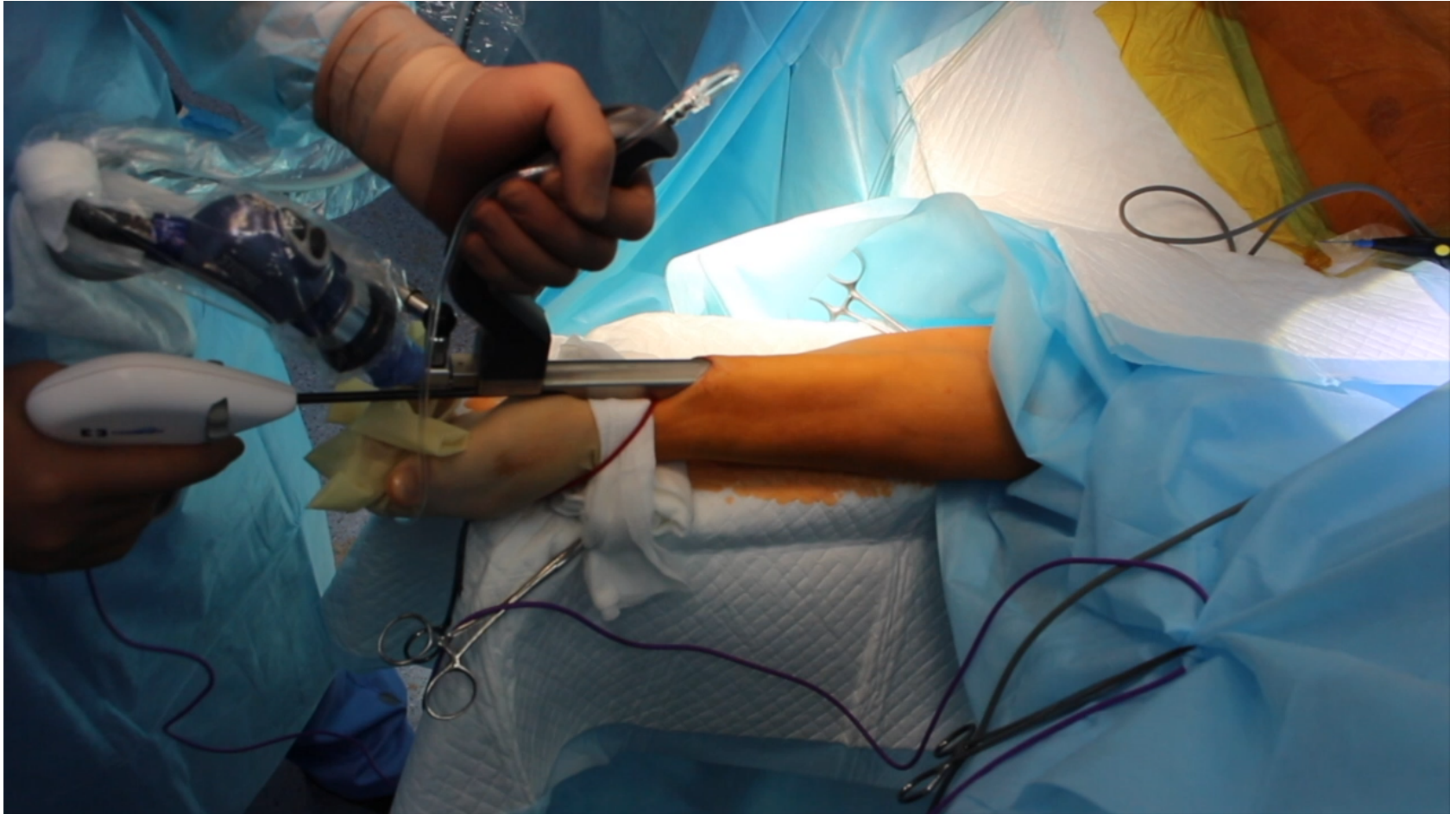
Oleksandr Babliak

Diagnostic and Treatment Center For Children
And Adults Of The Dobrobut Medical Network,
Kyiv, Ukraine

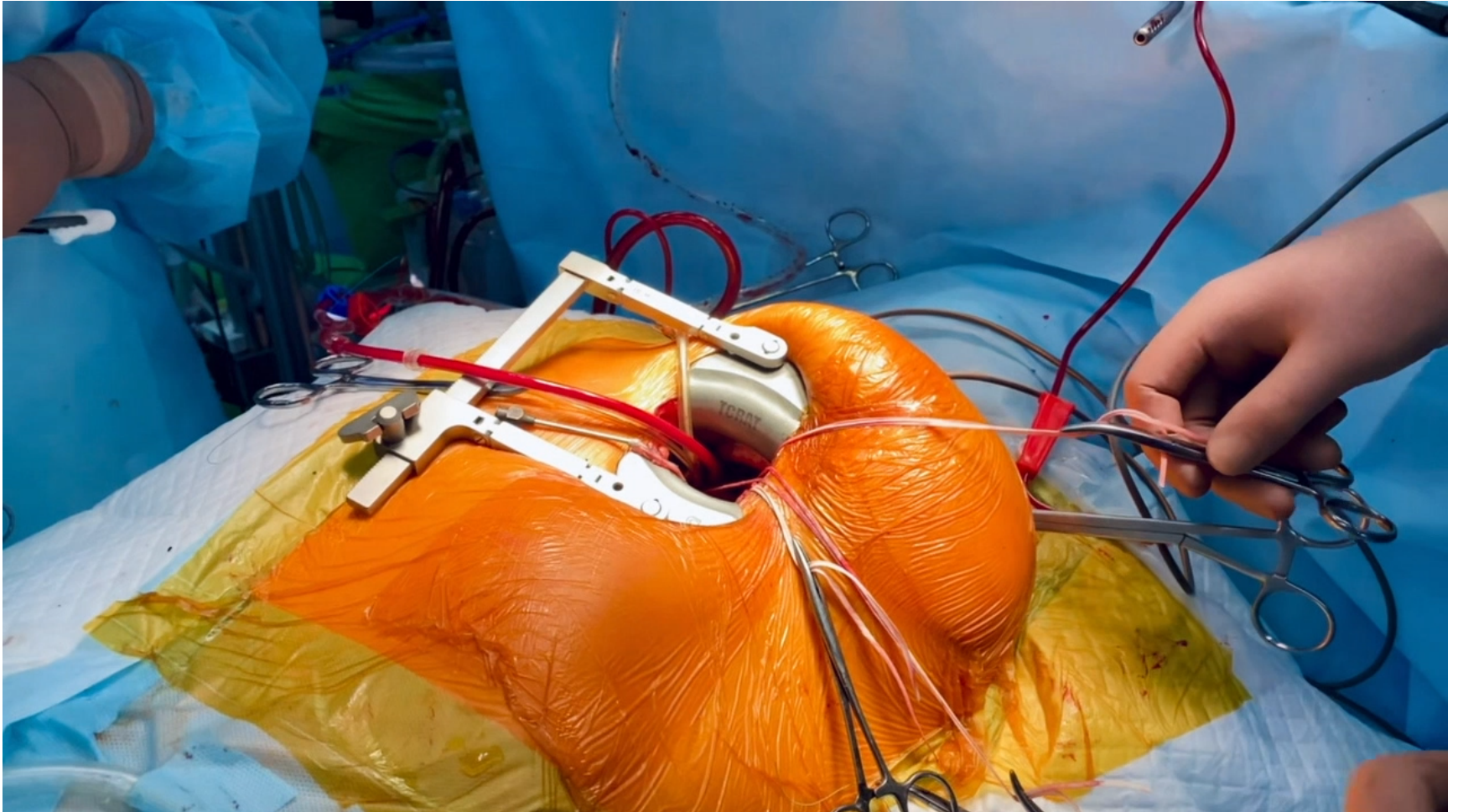
- No disclosures



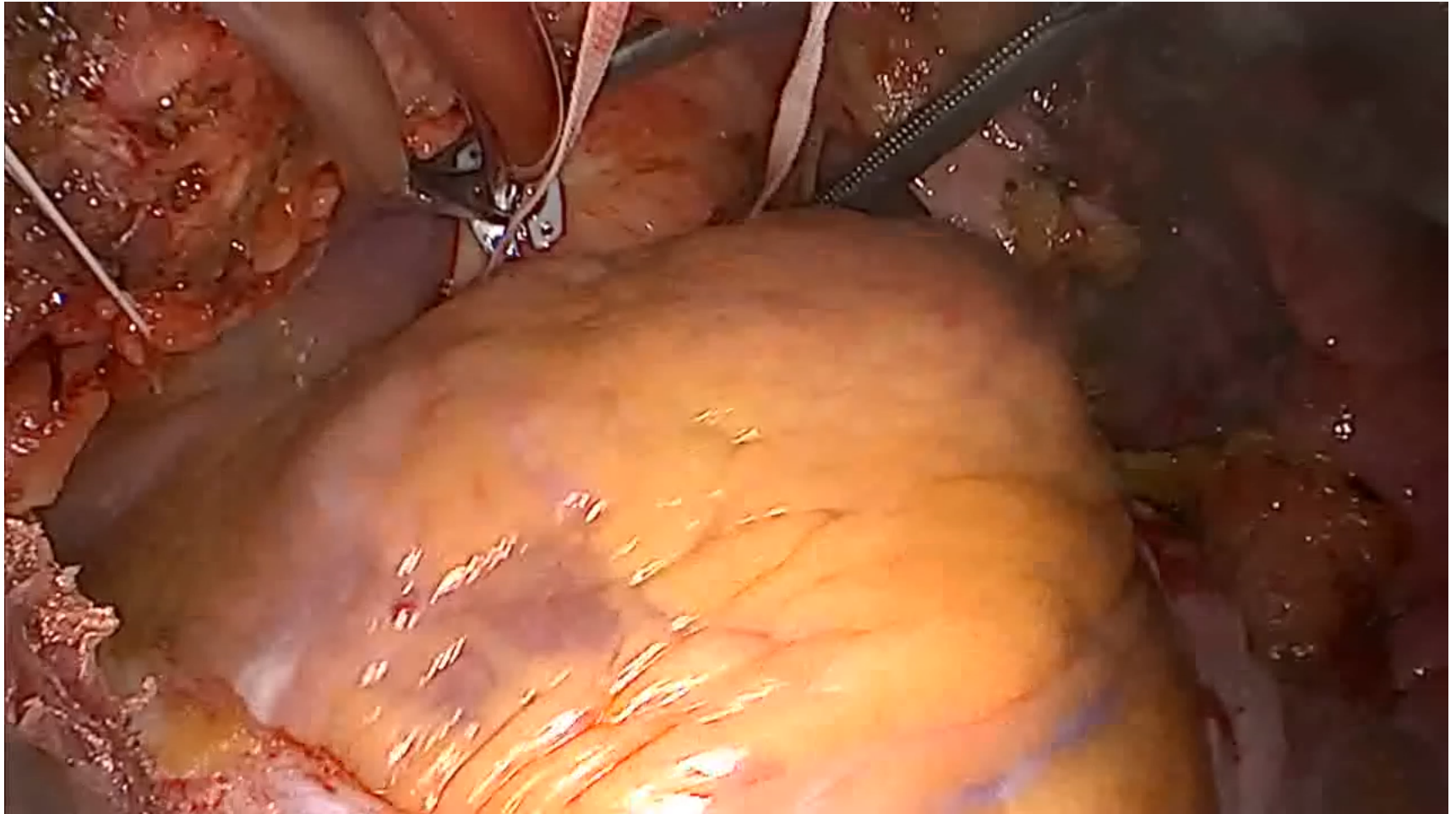
Radial artery harvesting – Bisleri technique



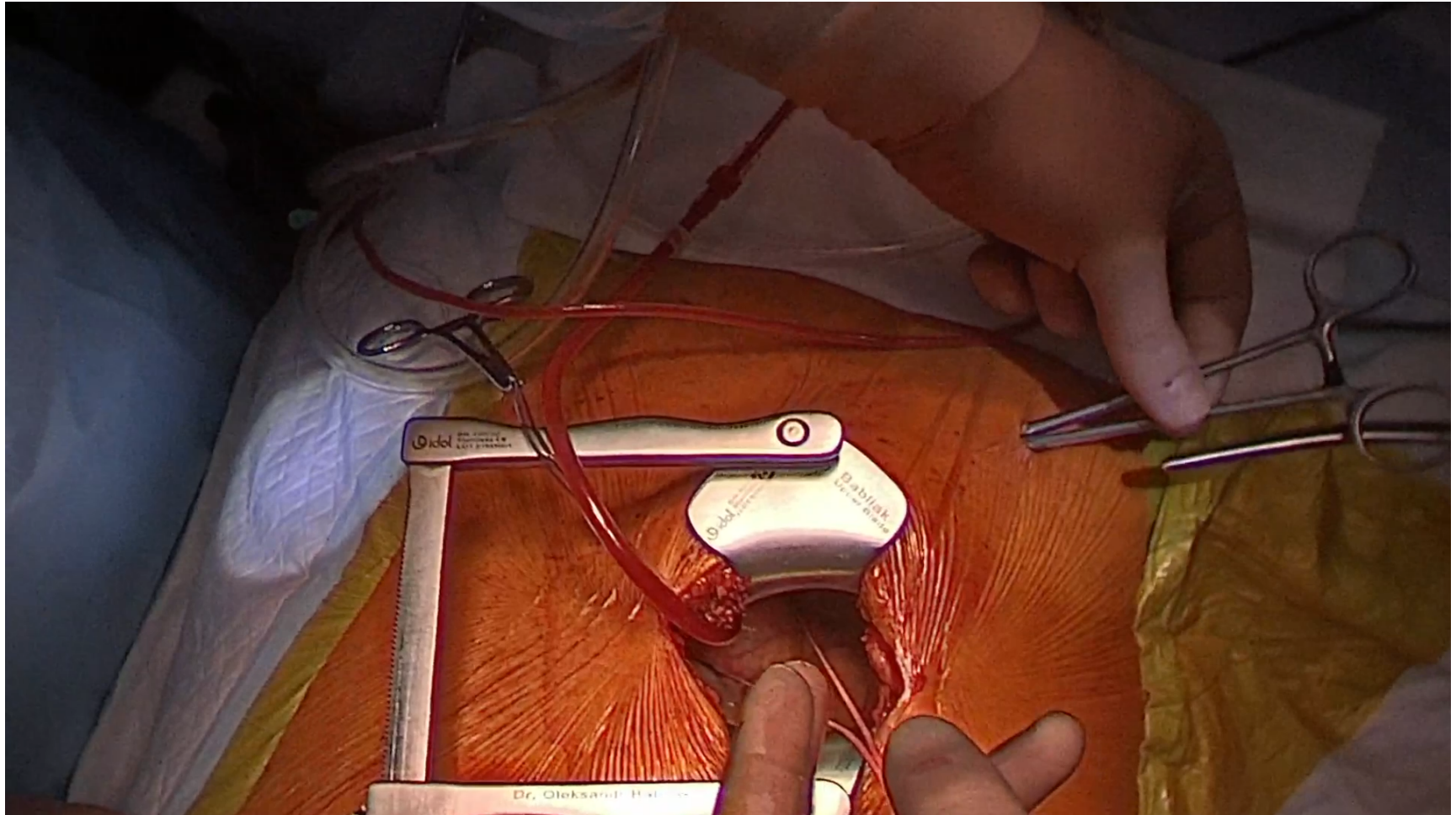
TCRAT in women

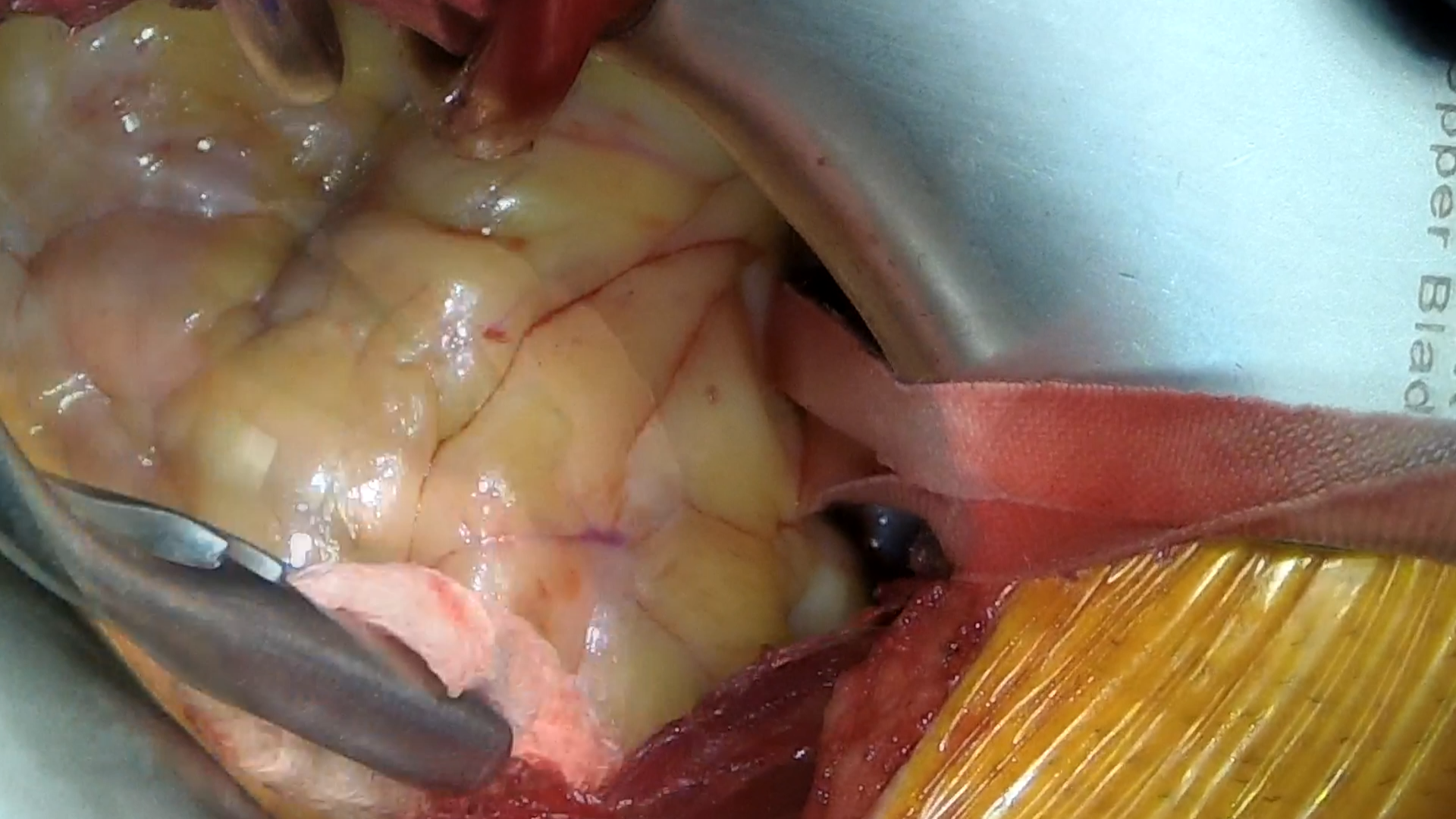


Full heart decompression

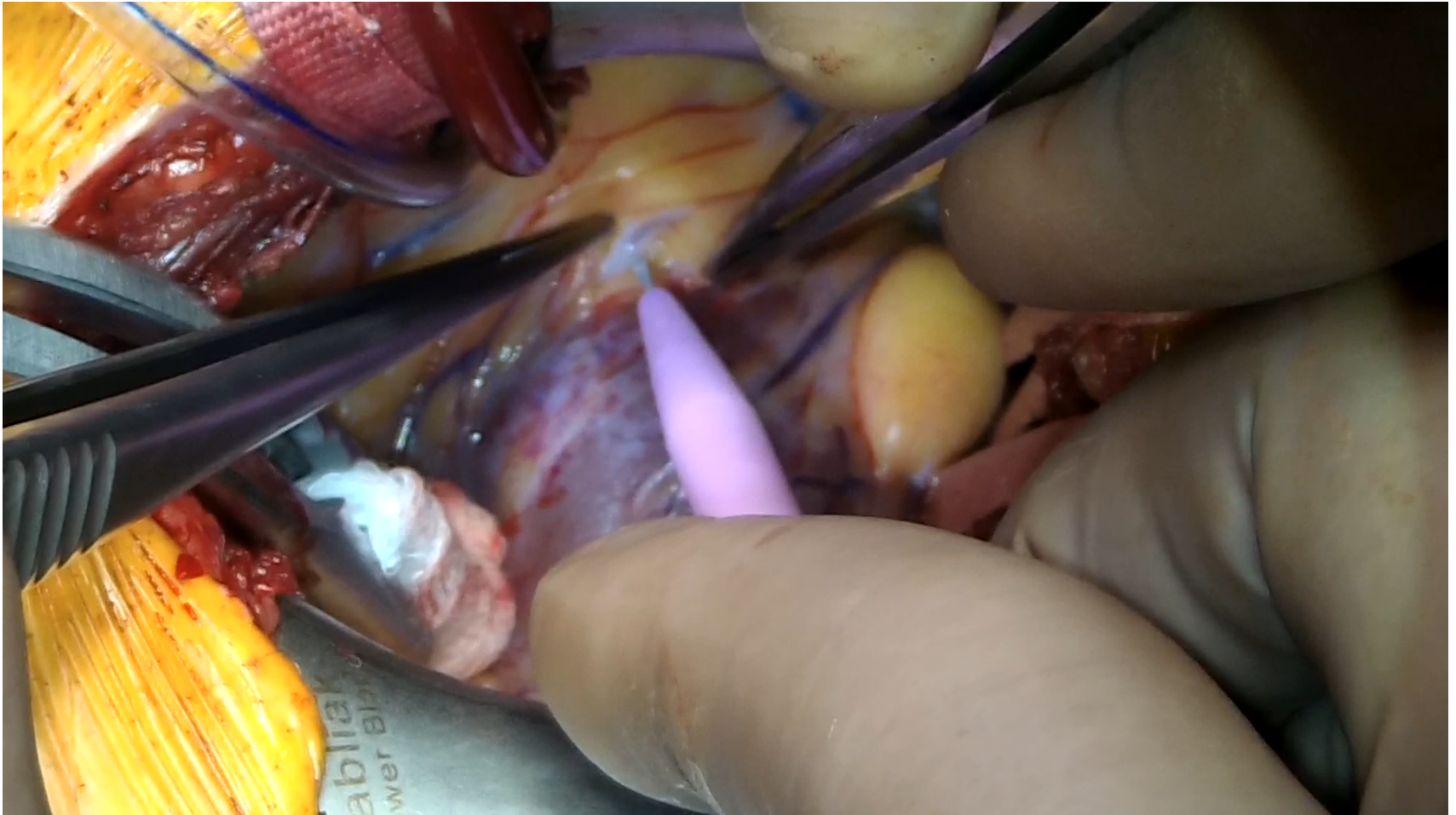


To verify the complete aortic crossclamping

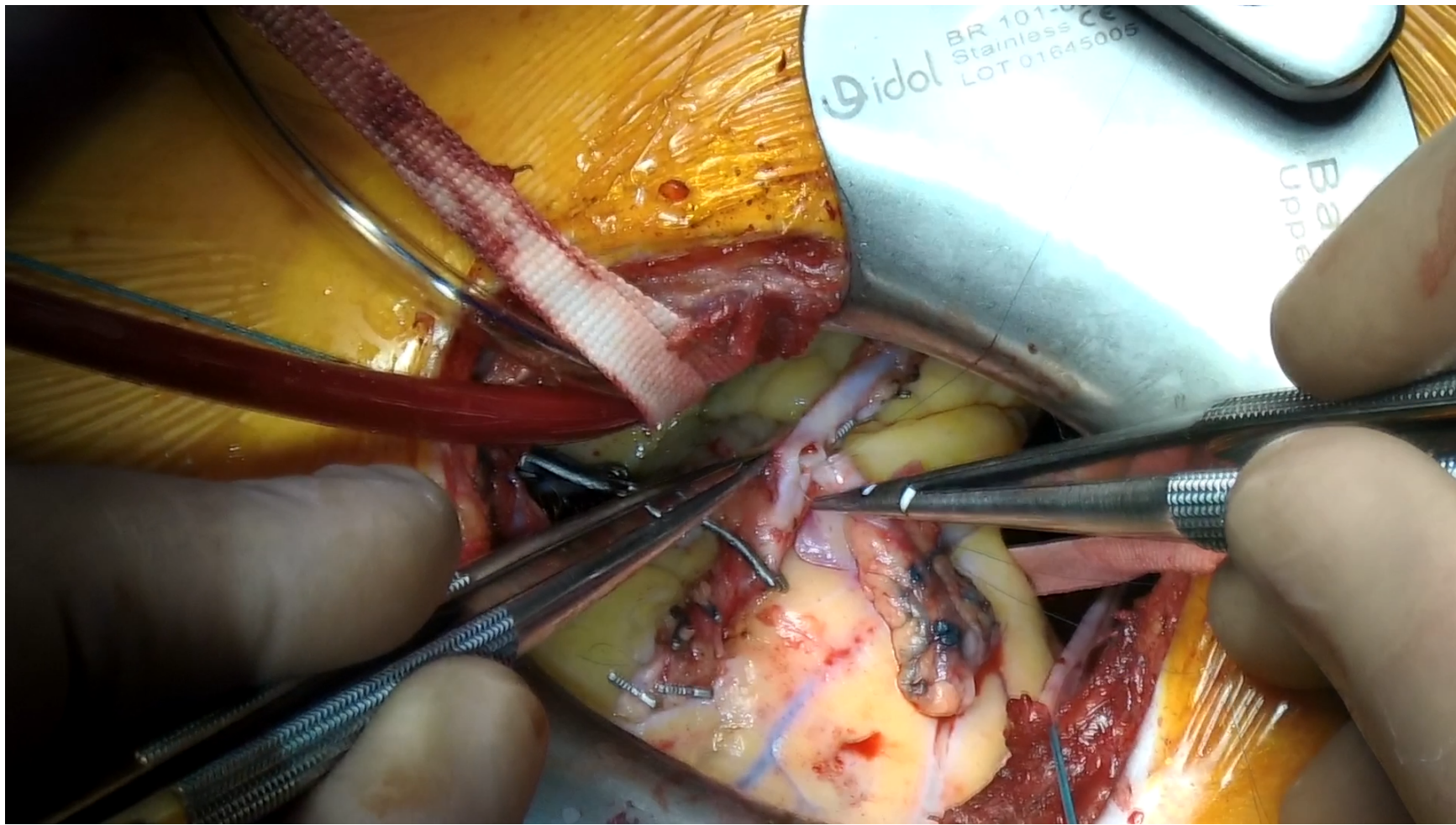


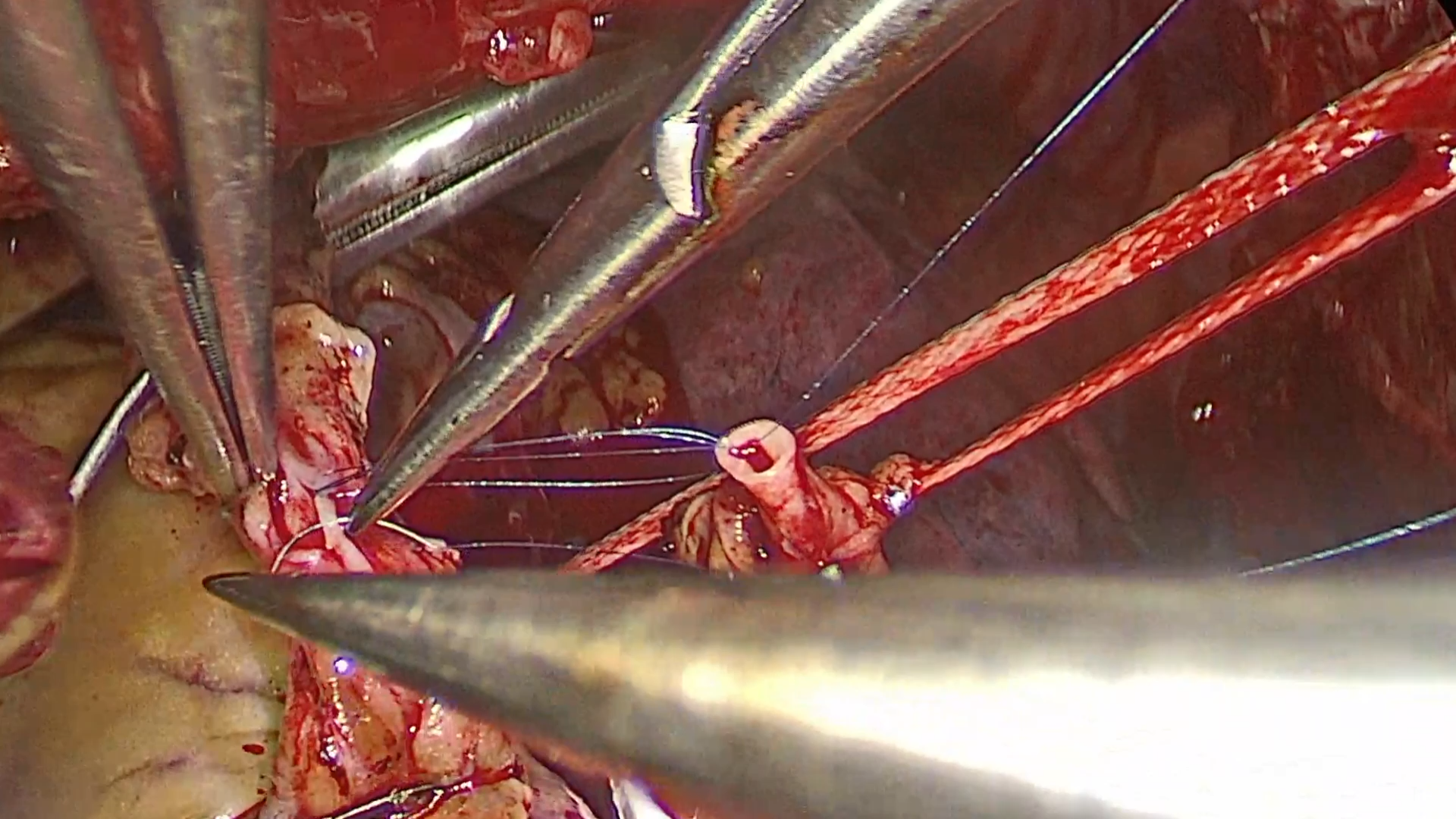


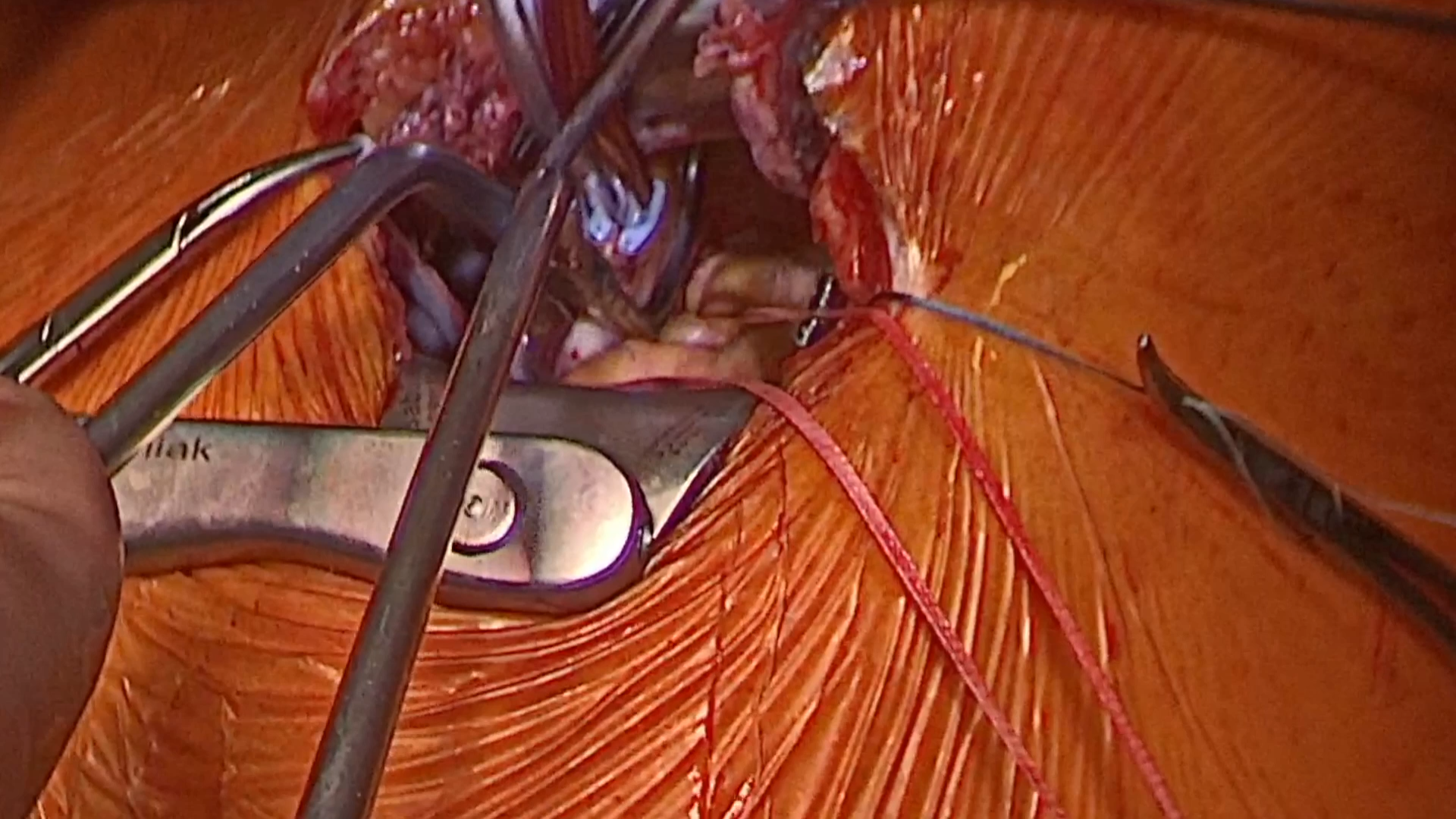
Set-up for distal anastomosis



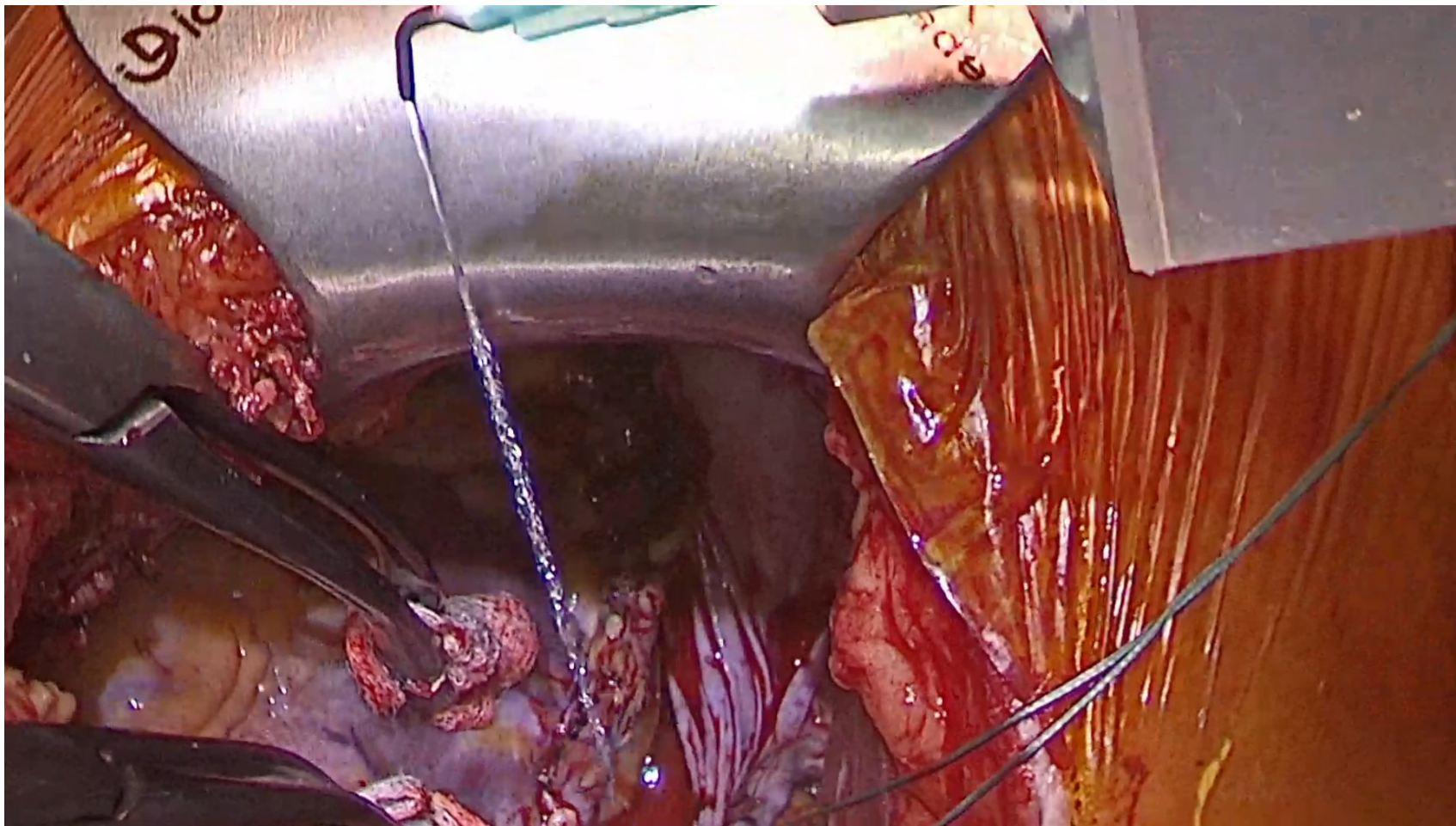
T-shunt during cardioplegia time





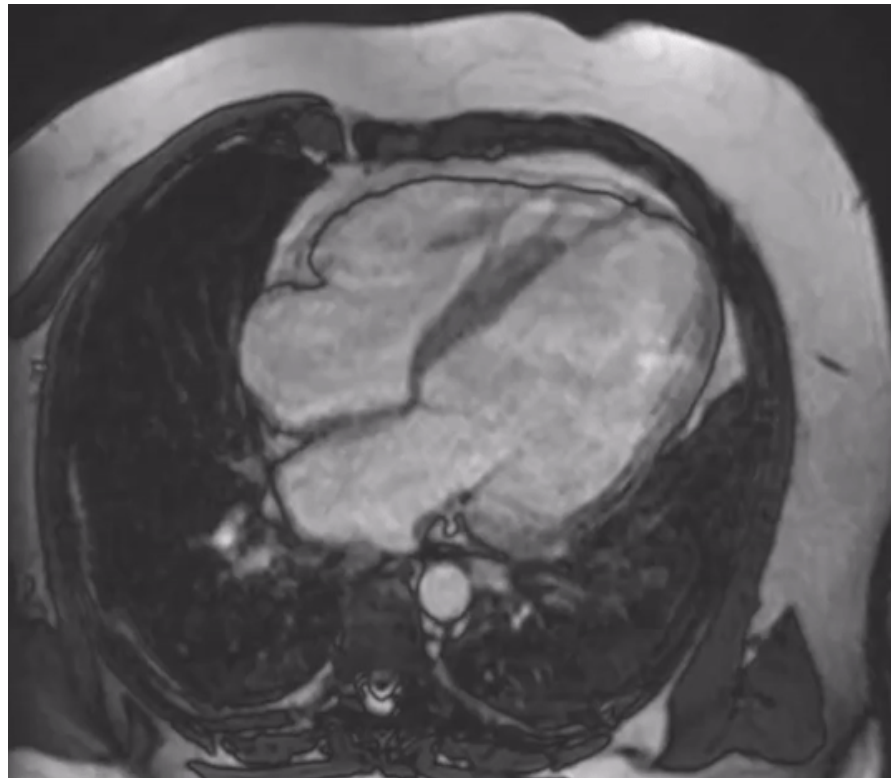


Hemostasis

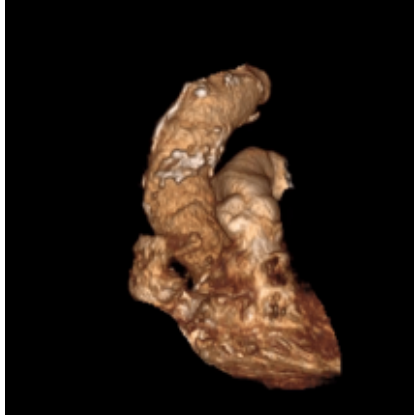


TCRAT 500 cases, 98% of all CABG

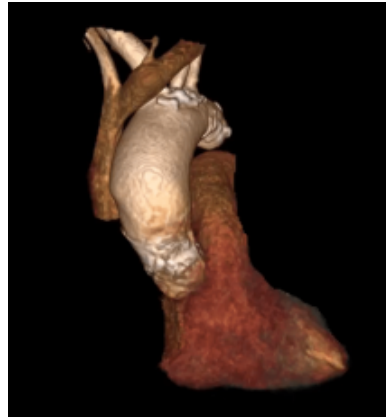
Age, years	62 ± 9.6 (31; 86)
Male, n (%)	425 (85 %)
BMI	30.1 ± 4.5 (19.4; 47.8)
LVEF, %	51.45 ± 9.5 (15; 70)
EuroScore II	1.06 ± 0.66 (0.5; 3.81)



CT based cannulation and CABG technique strategy



CABG
Sternotomy
- 8 (1.6%)



TCRAT Single-
clamp – 2;
MICS CABG - 2
(0.8%)



TCRAT
R femoral - 437 (87%)
L femoral - 34 (7%)
R axillary - 29 (6%)



	Uniarterial	Multiarterial	p
Patients, n	325	166	
Distal anastomosis	2.95 ± 0.6 (2;5)	2.99 ± 0.8 (2;5)	0.53
Operation time, min	258.7 ± 47.7 (145;495)	287.8 ± 53.5 (145;485)	<0.0001
CPB time, min	141.4 ± 31.4 (71;236)	152.2 ± 34.5 (75;230)	0.0005
Cross clamp time, min	67.4 ± 18.2 (31;133)	80.0 ± 20.4 (39;138)	<0.0001
Revision for bleeding, n (%)	4 (1.2%)	2 (0.6%)	0.52
Stroke, n (%)	2 (0.6%)	0	0.31
Hospital stay, days	5.65 ± 2.15 (3;20)	5.67 ± 2.82 (2;30)	0.93
Hospital & 30days mortality,n(%)	3 (0.9%)	0	0.2

Intraoperative complications:	
Aortic Dissection & Conversion to sternotomy, n (%)	2 (0.4%)
Perforation of Ascending Aorta, n (%)	2 (0.4%)
Left Pulmonary veins perforation, n (%)	2 (0.4%)
IVC Perforation, n (%)	1 (0.2%)
Postoperative complication	
Left Phrenicus nerve paralysis, n (%)	3 (0.6%)
Re-thoracotomy for bleeding, n (%)	6 (1.2%)
Superficial wound infections treated with VAC system, n (%)	2 (0.4%)

Conclusions

TCRAT CABG - SAFEST and SIMPLEST way for:

- Cardiac surgeon into the multivessel MI CABG
- Hospital to start MICS program

Thank you for supporting Ukraine

Conclusions

- TCRAT CABG
 - (LAT CABG)
- ≠ beating heart procedures:
≠ MIDCAB
≠ Multivessel MIDCAB
≠ MICS CABG (McGinn procedure)

Questions: How do we call this new procedure?

- TCRAT CABG or LAT CABG ?

≠ MIDCAB (beating heart)

≠ Multivessel MIDCAB (beating heart)

≠ MICS CABG (beating heart)

OPIOIDS USAGE in 500 patients

	With regional anesthesia (57 patients)	Without regional anesthesia (443 patients)
Intraoperative Fentanyl 0.005%, mean+-SD (min;max), ml	5.1 ± 2.9 (2;14)	16.1 ± 2.5 (4;24)
ICU postoperative Morphine 1%, mean+-SD (min;max), ml	3.56 ± 1.28 (0;14)	
Post ICU Morphine administration, n (%) of patients	10 (2%)	

RECOVERY in last 176 patients

	3 p/o day	5 p/o day	Increase in meters↑
6 min walking test, m±SD	203 ± 71.2 (38;450)	280.3 ± 91.5 (25;600)	77 (37.9%)