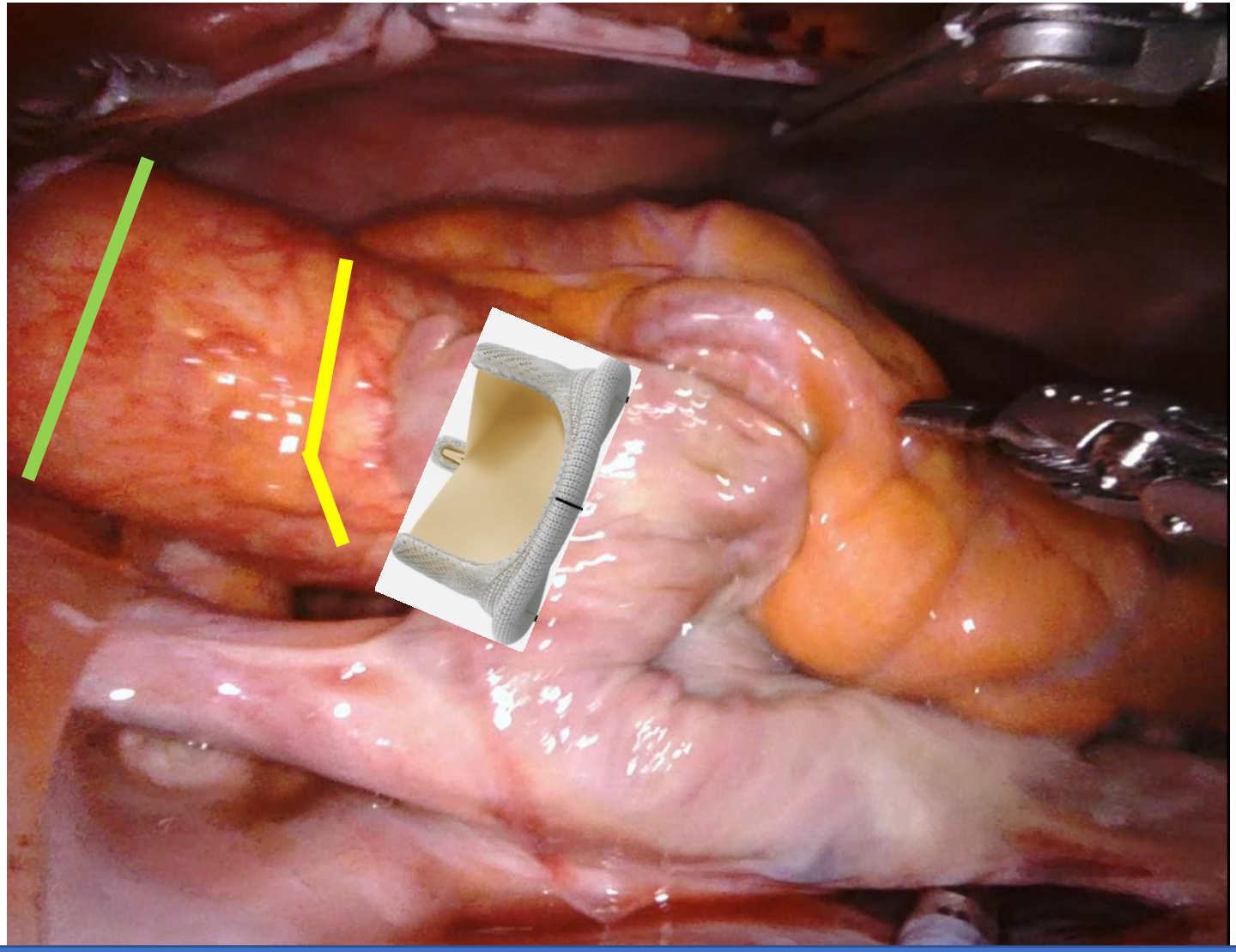
„bl ??“

Pr ry

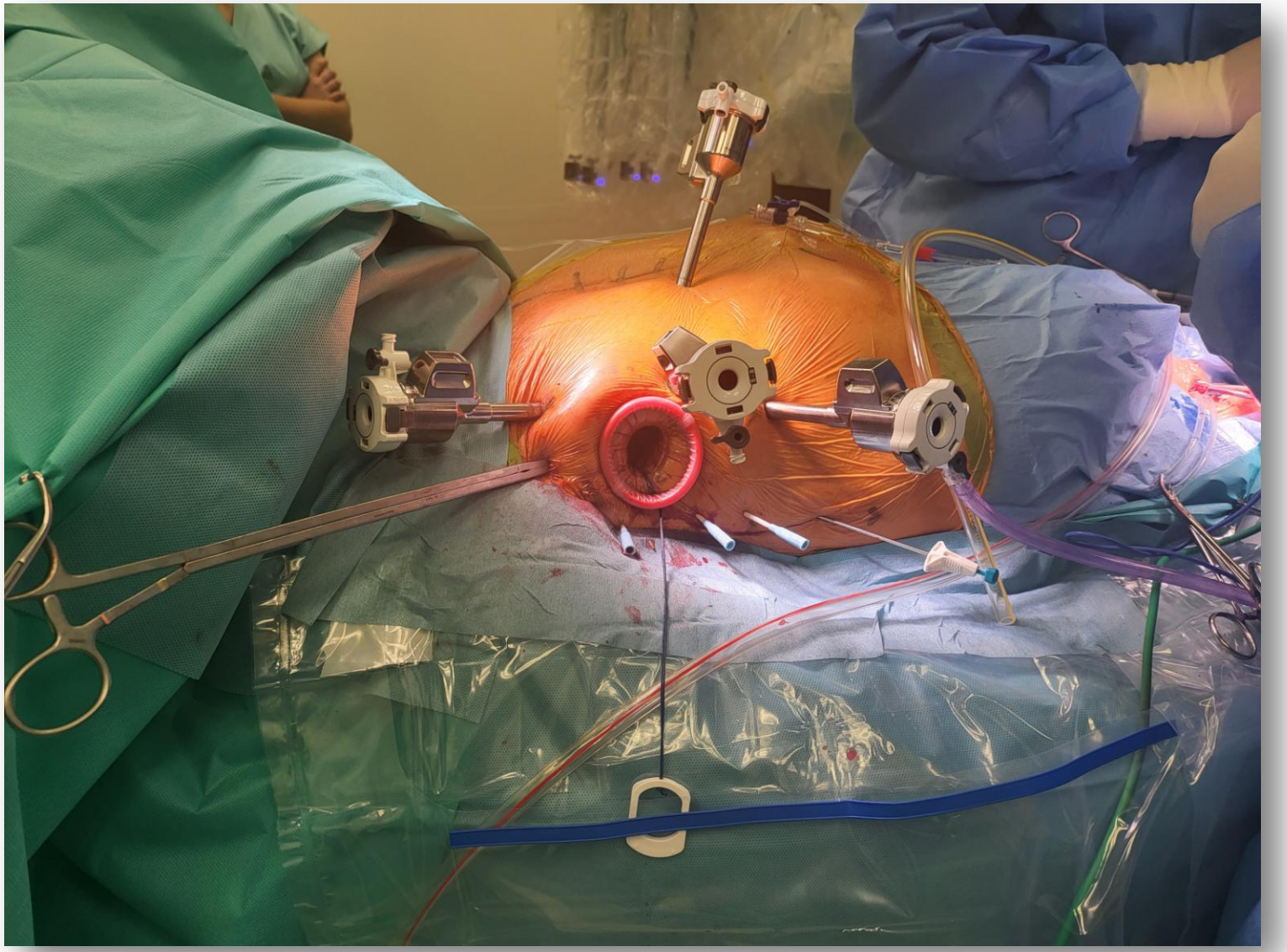
Robotic aortic valve replacement – is it feasible?????



MITRAL VALVE PROCEDURE – LATERAL ACCESS TO THE AORTIC ROOT

This approach is feasible for the AORTIC VALVE REPLACEMENT as well

Robotic AVR:
Set up and port placement



Robotic AVR:
Robot docking

Robotic aortic valve replacement

ATS 2022

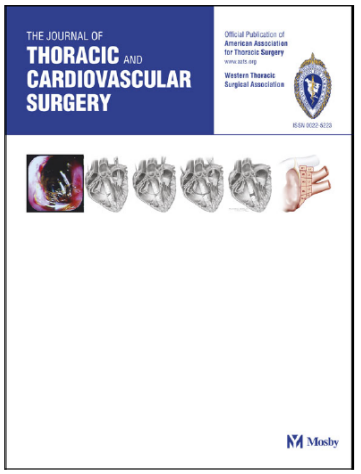
Robotic Aortic Valve Replacement: First 50 Cases

Lawrence M. Wei, MD, Chris C. Cook, MD, J. W. Awori Hayanga, MD, MPH, J. Scott Rankin, MD, Christopher E. Mascio, MD, and Vinay Badhwar, MD

Department of Cardiovascular and Thoracic Surgery, West Virginia University, Morgantown, West Virginia

- 50 patients
- Lateral approach (2cm LEAR)
- All surgical valves
  - 66% biological,
  - 34% mechanical

Journal Pre-proof



Outcomes Following Initial Multicenter Experience with Robotic Aortic Valve Replacement: Defining a Path Forward

Vinay Badhwar, MD, Daniel Pereda, MD PhD, Feras H. Khaliel, MD, Robinson Poffo, MD, Ali Darehzereshki, MD, J. Hunter Mehaffey, MD MSc, Tristan D. Yan, MD PhD, Serguei Melnitchouk, MD MPH, Arnar Geirsson, MD, Arman Arghami, MD, Jose L. Navia, MD, Goya V. Raikar, MD, Alberto C. Weber, MD, Danny Ramzy, MD, Štěpán Černý, MD PhD, Jan Vojáček, MD PhD, Robert L. Smith, MD, Johannes Bonatti, MD, Vinod H. Thourani, MD, Lawrence M. Wei, MD

JTCVS 2024

The objective: to report the initial 212 international cases performed

CPB: 166min; cross clamp: 116; **bioAVR: 71%**

Concomitant procedure:
aortic root enlargement (11%); LAAO (17%) w/wo biatrial CryoMAZE; transaortic septal myectomy, MVP or MVR

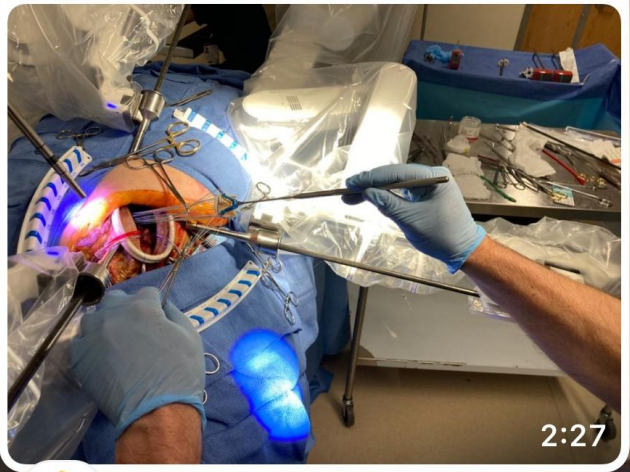
Results: **No conversion** PM: 2,5% Renal failure: 1,4%
Stroke: 0,9% **30-days mortality: 0,9%**

15:53 LTE 65

8 RAVR Task Force
Cerný, Pojar Marek, Vinay,...

~Johannes B... +1 (412) 925-0191
Super! 👍
2:24

~Johannes B... +1 (412) 925-0191



2:27

👍

We did our first RAVR in a cadaver lab. Very helpful experience. Moving on. Best regards Johannes
2:28

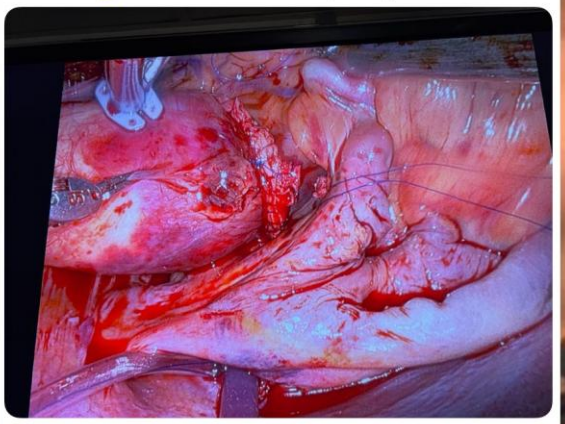
👍

15:53 LTE 65

8 RAVR Task Force
Cerný, Pojar Marek, Vinay,...

pá 18. 8.

~Serguei Mel... +1 (617) 320-0018

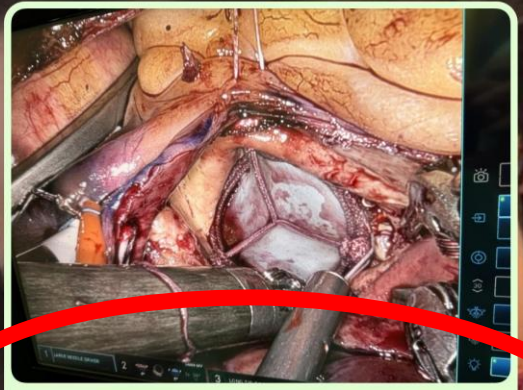


Happy to report that MGH team (Serguei and Nat) have also joined the RAVR club. We placed a 23 Inspiris valve uneventfully. Patient is extubated and is doing well. Thank you to Dr. Badhwar, Dr. Wei, and the whole WVU team for pioneering this approach and for providing such a great training platform. Very happy to be part of this initiative.
18:30

~Serguei Mel... +1 (617) 320-0018

14:08 5G 77

8 **RAVR Task Force**
Cerný, Pojar Marek, Vinay,...



Another valve is in at UH HRADEC KRALOVE. Jan and Stepan 13:36

Vinay Badhwar
Congratulations! Keep up the great work 13:37

Thanks Vinay 13:37

~Larry Wei +1 (412) 779-3918
Congratulations! 13:38

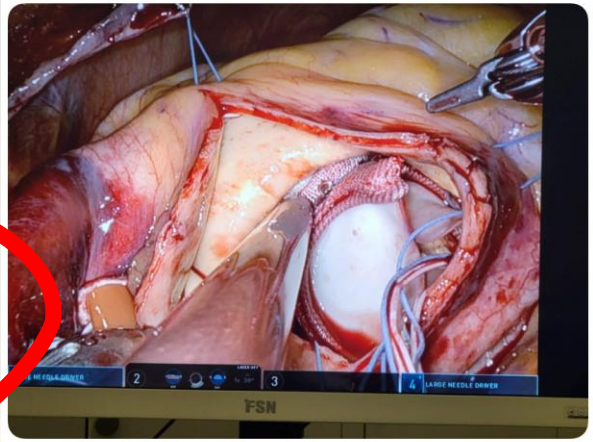
~Danny Ramzy +1 (323) 356-4364
Great work. Congratulations! 13:38

15:58 LTE 64

RAVR Task Force
Cerný, Pojar Marek, Vinay,...

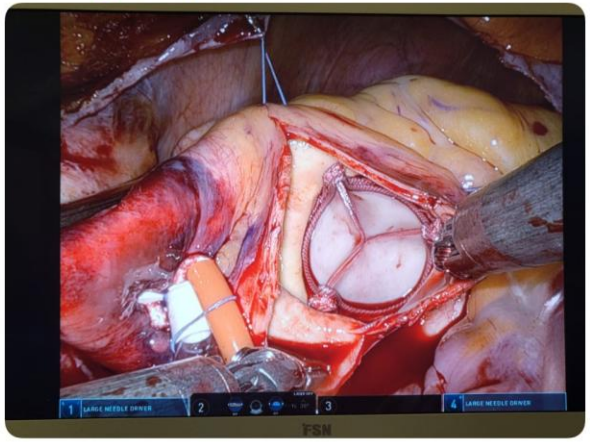
Thanks Vinay! Jan is doing the case and I am just reading the procedure guide for him 🤝. 11:15

Cerný Štěpán



Just corknoting the valve... 11:36

Cerný Štěpán

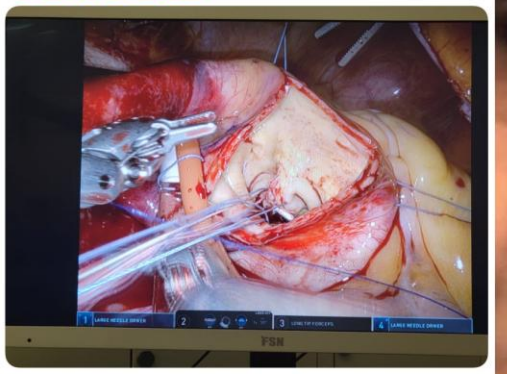


The valve is in.... 11:43

15:57 LTE 64

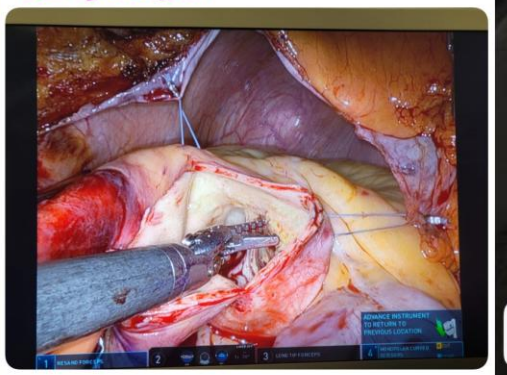
RAVR Task Force
Cerný, Pojar Marek, Vinay,...

Cerný Štěpán

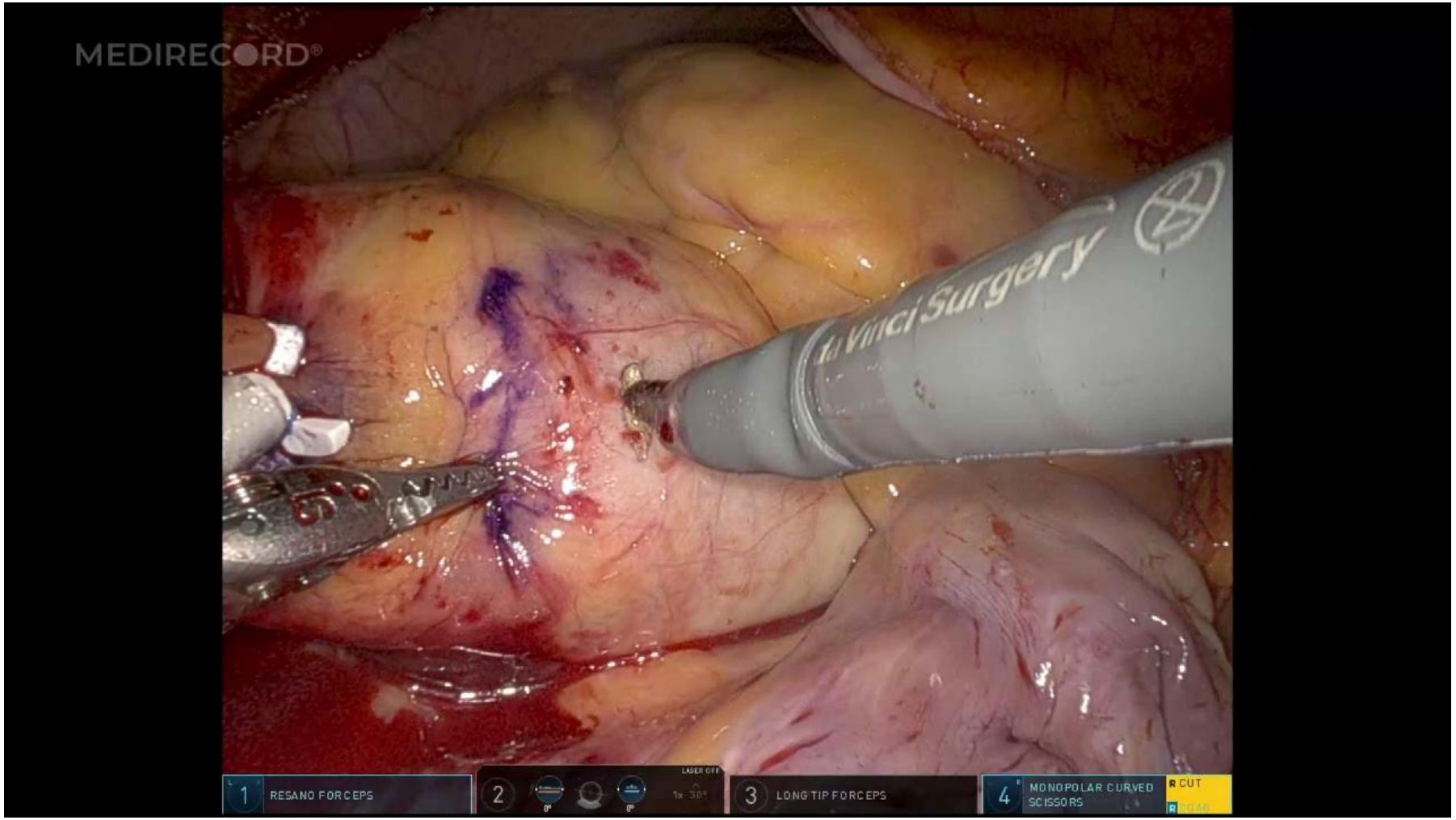


Congratulations Tristan! We in Hradec Kralove are just in the middle of our second case 😉 11:00

Cerný Štěpán



And already using some of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Robotic valve surgery – the future

Masters of Cardiothoracic Surgery

Robotic-assisted double valve surgery

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Institute, Morgantown, WV 26506, USA. Email: vinay.badhwar@wvumedicine.org.

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View this article at:

CTSNet

Robotic Aortic Valve Replacement with Concomitant Mitral Valve Repair and Bi-Atrial Cox Maze

Thursday, February 24, 2022

By Vinay Badhwar, Lawrence Wei

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Badhwar V, Wei LM. Robotic Aortic Valve Replacement with Concomitant Mitral Valve Repair and Bi-Atrial Cox Maze. February 2022. doi:10.25373/ctsnet.19232997

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Cardiac

Cardiac

Videos - General

Surgical Technique

Identical to the authors' approach to robotic mitral valve surgery, robotic AVR—or RAVR—was developed utilizing a three robotic port technique accompanied by a fourth intercostal space 3 to 4cm mini lateral thoracotomy primary working incision at the level of the anterior axillary line (1,2). Peripheral cardiopulmonary bypass (CPB) with bicaval drainage is utilized in all patients. Transthoracic aortic clamping and antegrade 8:1 blood cardioplegia every twenty minutes is utilized to facilitate all cases.

Badhwar V et al: doi:10.21037/acs-2022-mvs-79

Badhwar V et al: doi:10.25373/ctsnet.19232997

Conclusions

Conclusions

Advantages of robotic AVR??
As good as ……. And?

The only fully endoscopic approach

The choice of the valve substitute??

Promising technique for specialized robotic cardiac centers