Sou o paciente: qual abordagem cirúrgica devo escolher: prostatectomia aberta vs. robótica - Aberta

Alvaro S. Sarkis
Professor Livre Docente
Universidade de Sao Paulo
ICESP

“INTUITIVE” MARKET VALUE = $24.3 Billion

X

UROLOGIST MARKET VALUE =?

Indications of ORRP vs RALRP

As mesmas

Robotic surgery evaluation: 10 years

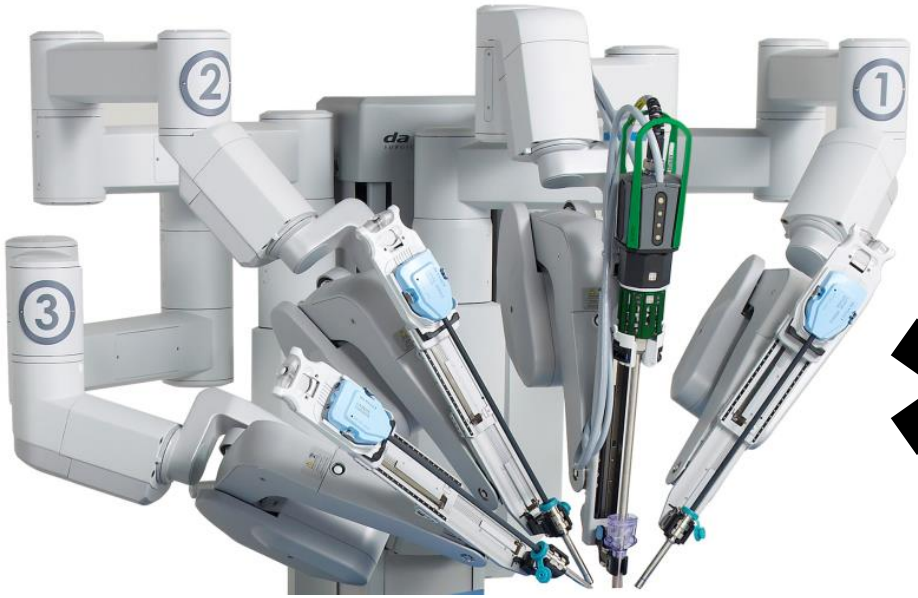
- 2003–2013, the number of RARP increased from about 1·8% to 85% in the USA

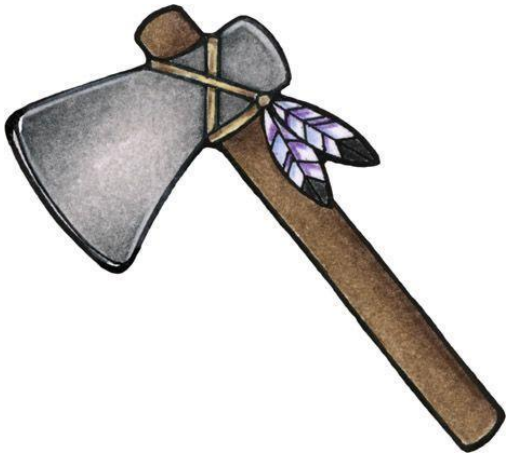
- despite the lack of high level evidence comparing robotic surgery to the standard, cheaper, open technique

Prostatectomia aberta versus robótica

Qual a melhor técnica?

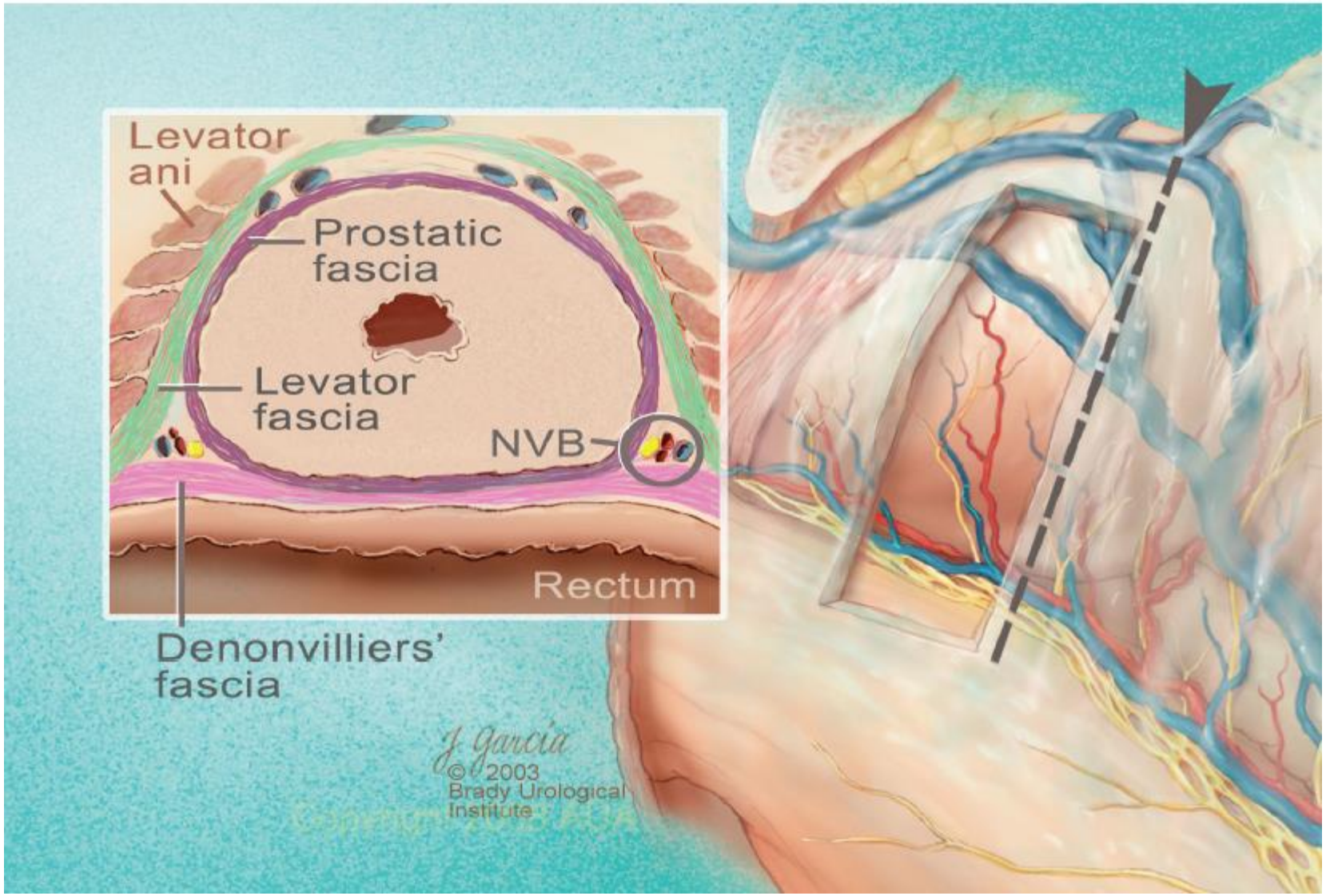
EXISTE RESPOSTA???



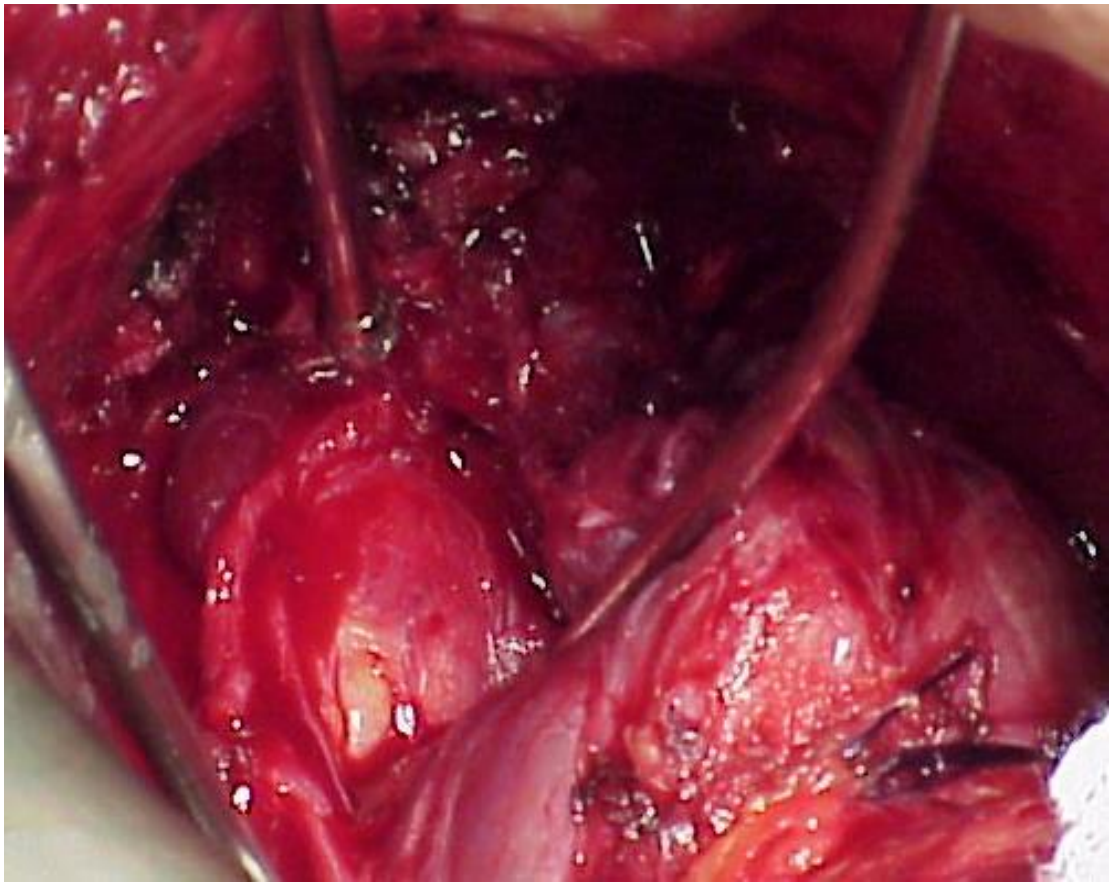


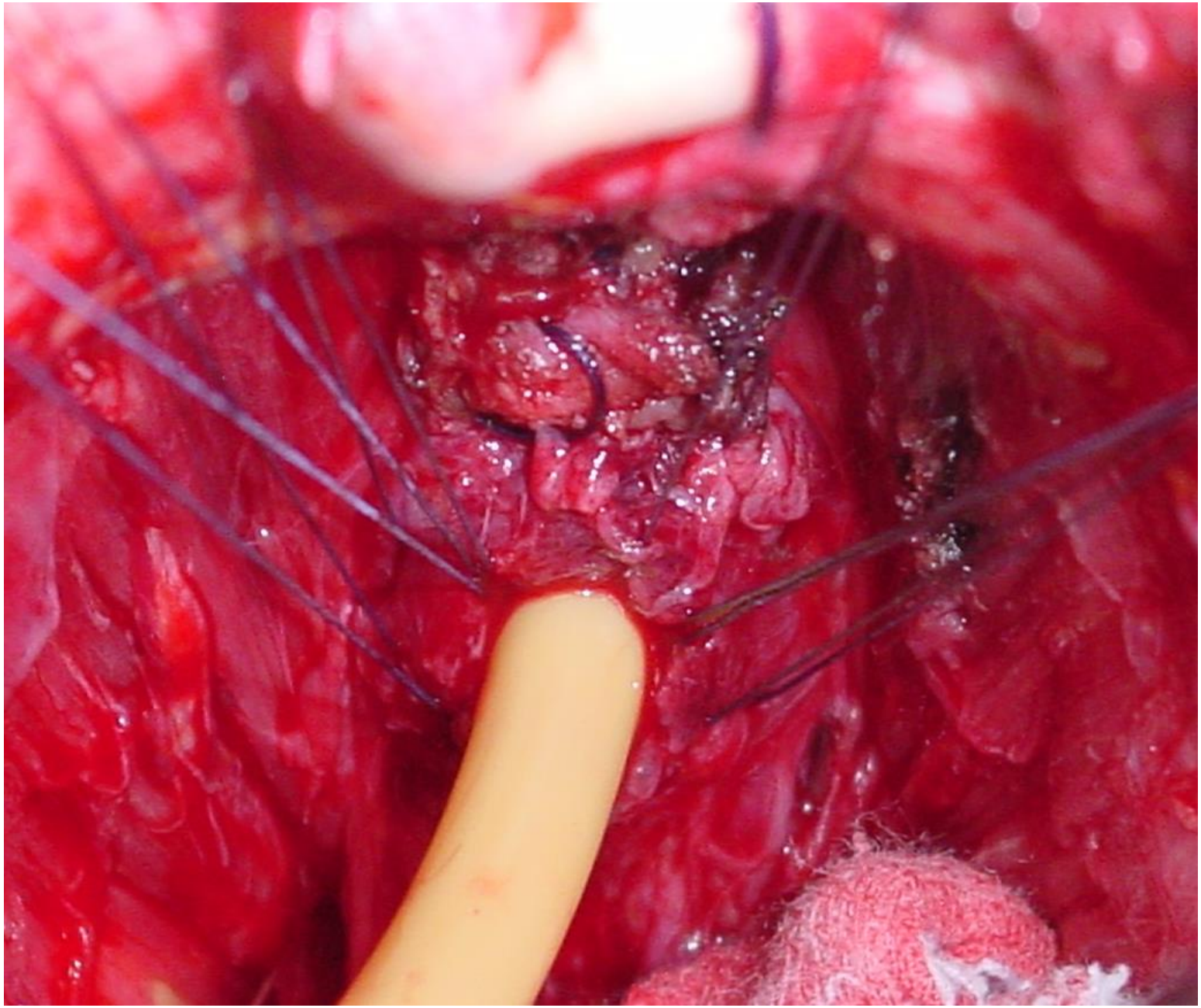
ÁLVARO 2018?

ÁLVARO 2002 - 2007

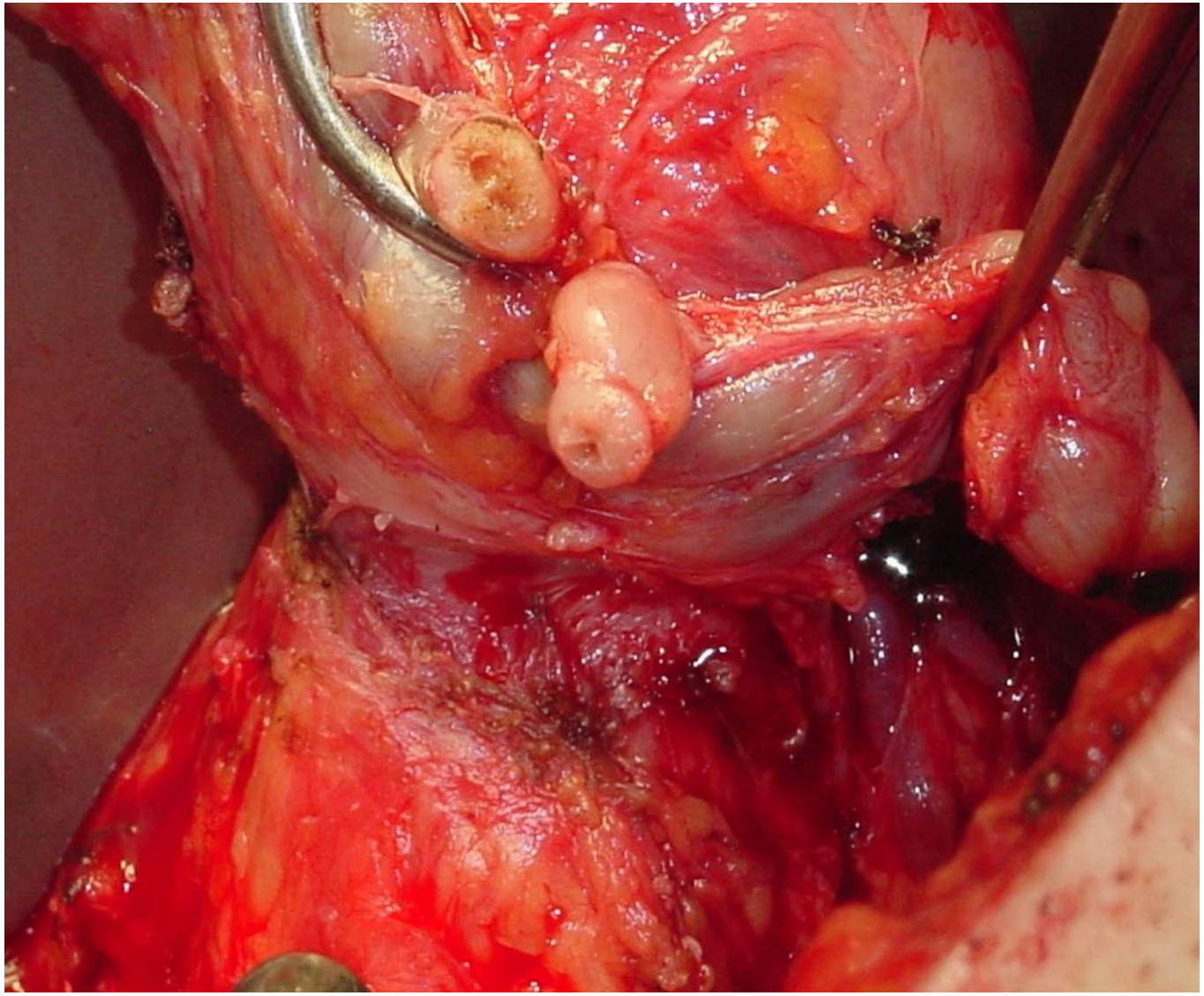

Levator ani
Prostatic fascia
Levator fascia
NVB
Rectum
Denonvilliers' fascia
J. Garcia
© 2003 Brady Urological Institute

Incisão

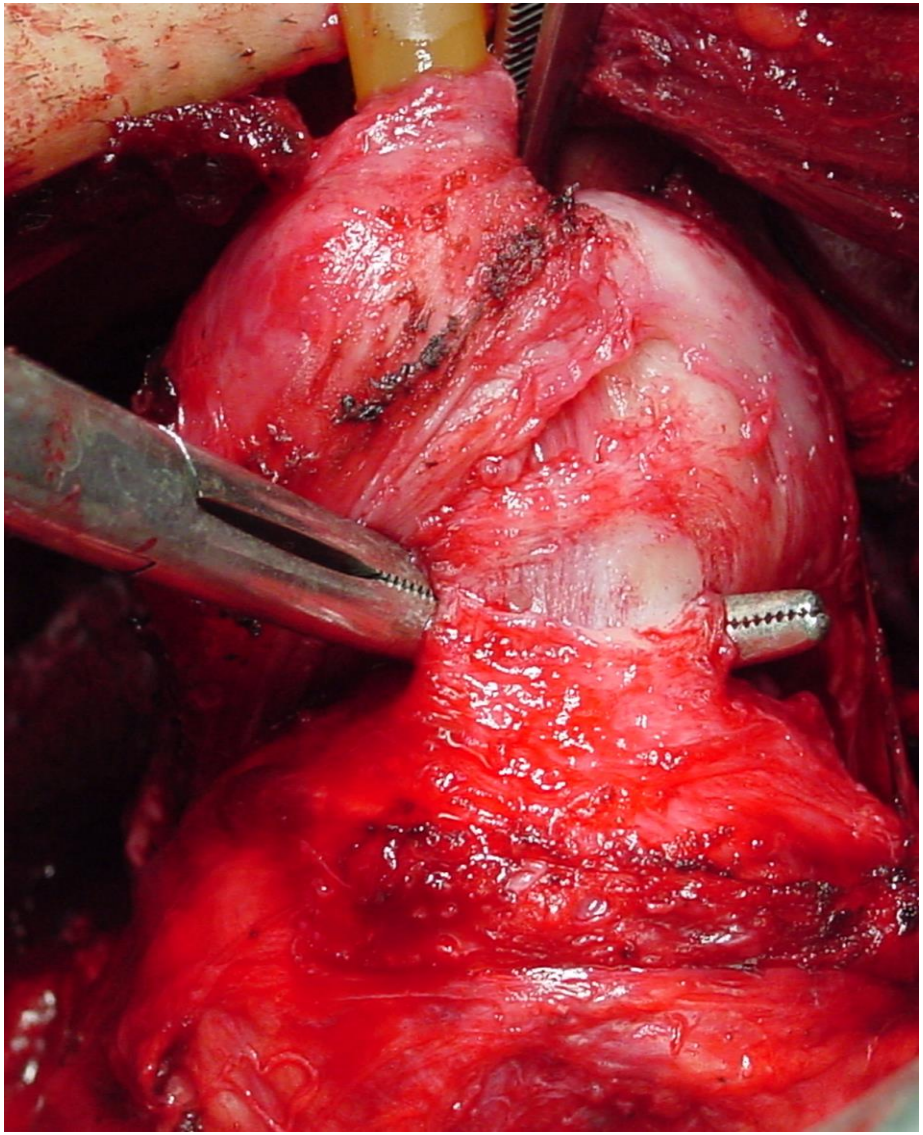




Dissecção do colo vesical



Dissecção do colo vesical



Meta-analisis

EUROPEAN UROLOGY 62 (2012) 1–15

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Platinum Priority – Review – Prostate Cancer

Editorial by Quoc-Dien Trinh, Khurshid R. Ghani and Mani Menon on pp. 16–18 of this issue

Positive Surgical Margin and Perioperative Complication Rates of Primary Surgical Treatments for Prostate Cancer: A Systematic Review and Meta-Analysis Comparing Retropubic, Laparoscopic, and Robotic Prostatectomy

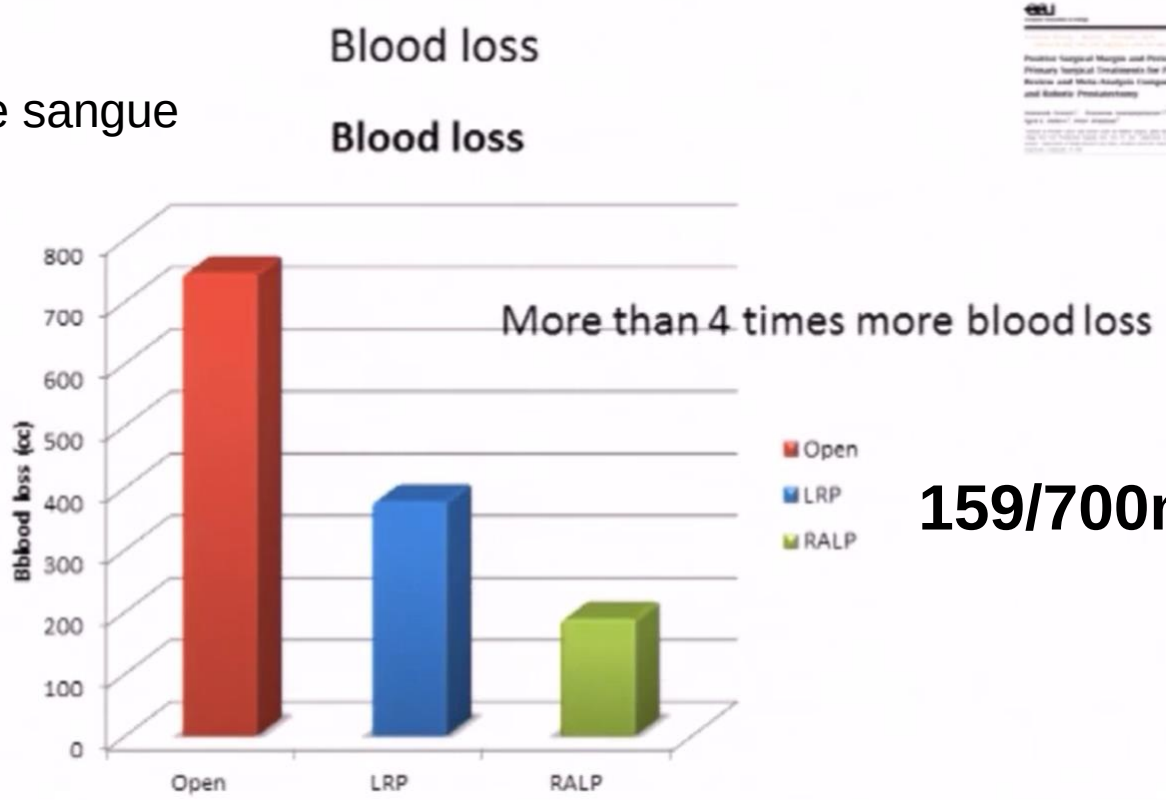
Ashutosh Tewari[a,], Prasanna Sooriakumaran[a,b], Daniel A. Bloch[c], Usha Seshadri-Kreaden[d], April E. Hebert[d], Peter Wiklund[b]*

[a] Institute of Prostate Cancer and LeFrak Center for Robotic Surgery, James Buchanan Brady Foundation Department of Urology, Weill Cornell Medical College–New York Presbyterian Hospital, New York, NY, USA; [b] Department of Molecular Medicine and Surgery, Karolinska University Hospital, Solna, Sweden; [c] Department of Health Research and Policy, Stanford University School of Medicine, Stanford, CA, USA; [d] Department of Clinical Affairs, Intuitive Surgical Inc., Sunnyvale, CA, USA

167,184 Open

62,389 Robotic

Perda de sangue



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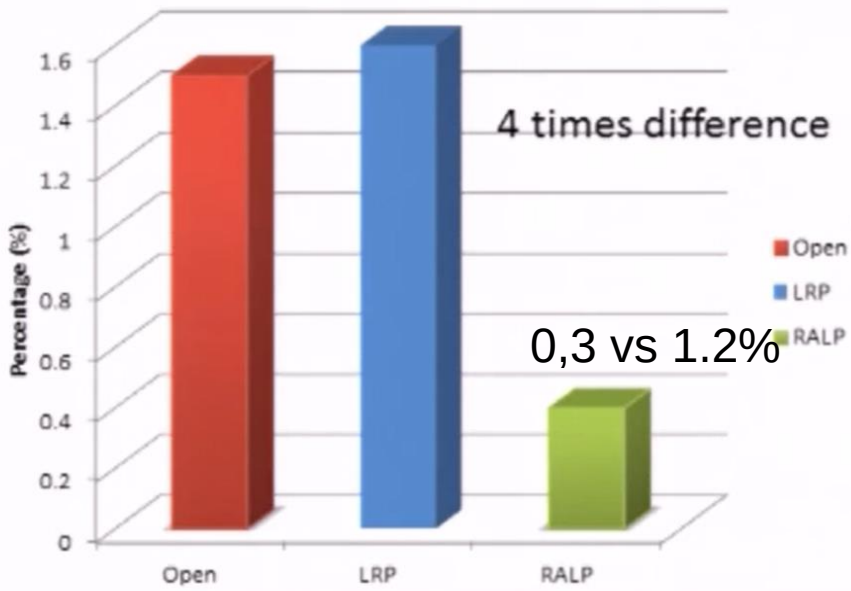
Perioperative outcomes	Weighted average						Propensity-adjusted estimates					
	Unadjusted estimates			Unadjusted *p* values			Adjusted differences[a]			Adjusted *p* value		
	ORP	LRP	RALP	ORP vs LRP	ORP vs RALP	LRP vs RALP	ORP minus LRP	ORP minus RALP	LRP minus RALP	ORP vs LRP	ORP vs RALP	LRP vs RALP
Estimated blood loss, ml												
Cohorts (patients), *n*	94 (31 492)	80 (24 688)	112 (41 672)									
Mean (SD)	745.3 (396.0)	377.5 (206.8)	188.0 (86.5)	<0.0001*	<0.0001*	<0.0001*	363.1	562.5	127.8	<0.0001*	<0.0001*	<0.0001*
95% CI	665.4-825.6	332.2-423.0	174.1-204.5				272.4-453.8	485.2-639.8	95.4-160.2			

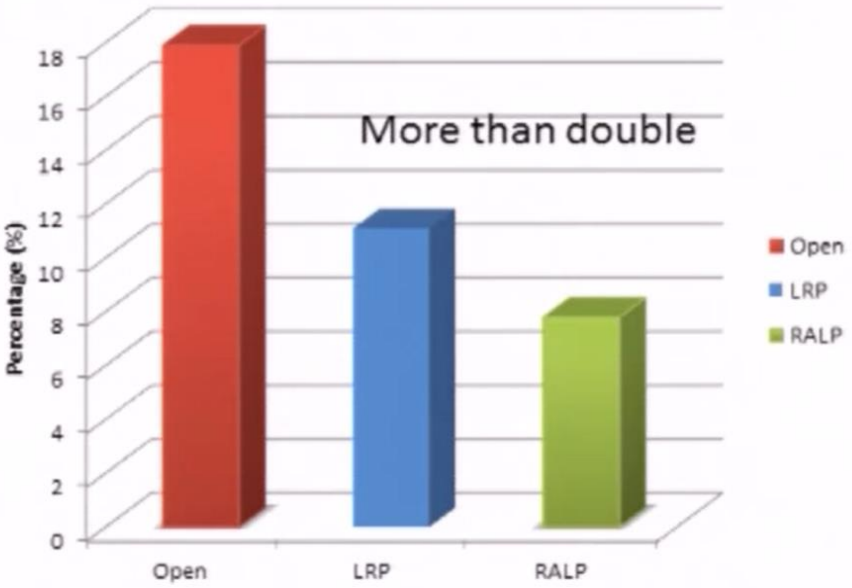
Eur Urol. 2012 Jul;62(1):1-15. doi: 10.1016/j.eururo.2012.02.029. Epub 2012 Feb 24.
Positive surgical margin and perioperative complication rates of primary surgical treatments for prostate cancer: a systematic review and meta-analysis comparing retropubic, laparoscopic, and robotic prostatectomy.
Tewari AI, Soorlakumaran P, Bloch DA, Seshadri-Kreaden U, Hebert AE, Wiklund P.

Complication Rates

Intra-operative complication rates



Perioperative complication rates



Primary outcome	Unadjusted estimates						Propensity-adjusted estimates					
	Weighted averages			Unadjusted *p* value			Adjusted differences*			Adjusted *p* value		
	ORP	LRP	RALP	ORP vs LRP	ORP vs RALP	LRP vs RALP	ORP minus LRP	ORP minus RALP	LRP minus RALP	ORP vs LRP	ORP vs RALP	LRP vs RALP
Total intraoperative												
Cohorts (patients), n	39 (16 647)	57 (16 389)	42 (14 309)	0.79	0.0005*	<0.0001*	−0.32	1.15	1.10	0.93	<0.0001*	<0.0001*
Mean (SD)	1.5 (1.6)	1.6 (1.9)	0.4 (0.5)				−1.0 to 0.4	0.7–1.6	0.7–1.5			
95% CI	1.0–2.0	1.1–2.1	0.4–0.7									
Total perioperative												
Cohorts (patients), n	39 (16 647)	57 (16 389)	42 (14 309)	0.0008*	<0.0001*	0.04*	5.24	13.76	6.74	0.08	<0.0001*	0.002*
Mean (SD)	17.9 (9.1)	11.1 (9.6)	7.8 (6.3)				−0.7 to 11.1	9.5–18.0	2.6–10.9			
95% CI	15.0–20.8	8.6–13.6	5.9–9.7									

Eur Urol. 2012 Jul;62(1):1-15. doi: 10.1016/j.eururo.2012.02.029. Epub 2012 Feb 24.
Positive surgical margin and perioperative complication rates of primary surgical treatments for prostate cancer: a systematic review and meta-analysis comparing retropubic, laparoscopic, and robotic prostatectomy.
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[d] *Department of Clinical Affairs, Intuitive Surgical Inc., Sunnyvale, CA, USA*

EURURO-5403; No. of Pages 7
ARTICLE IN PRESS
EUROPEAN UROLOGY XXX (2013) XXX–XXX

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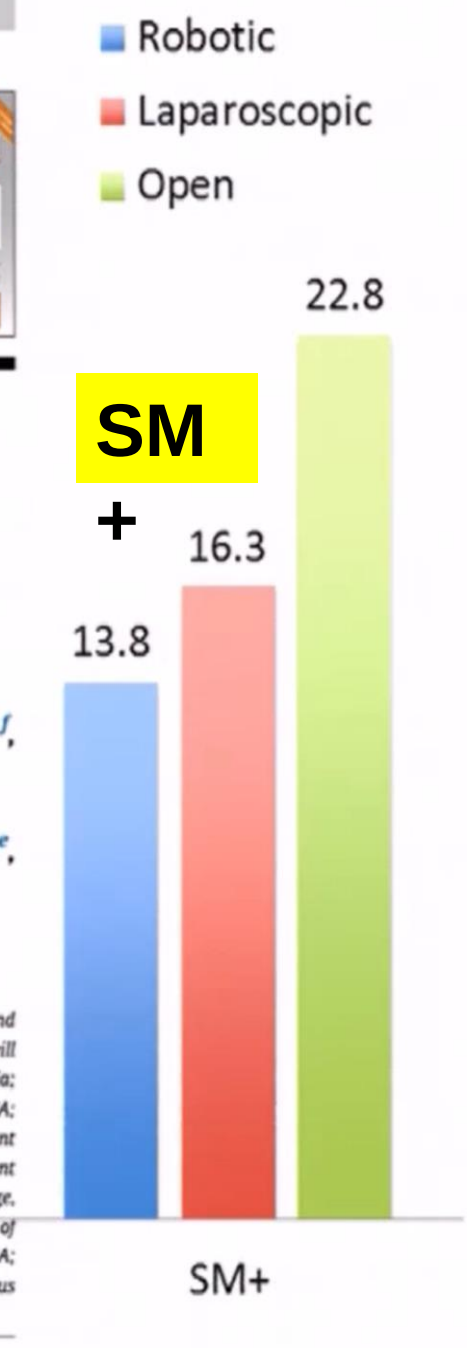
Platinum Priority – Prostate Cancer

Editorial by XXX on pp. x–y of this issue

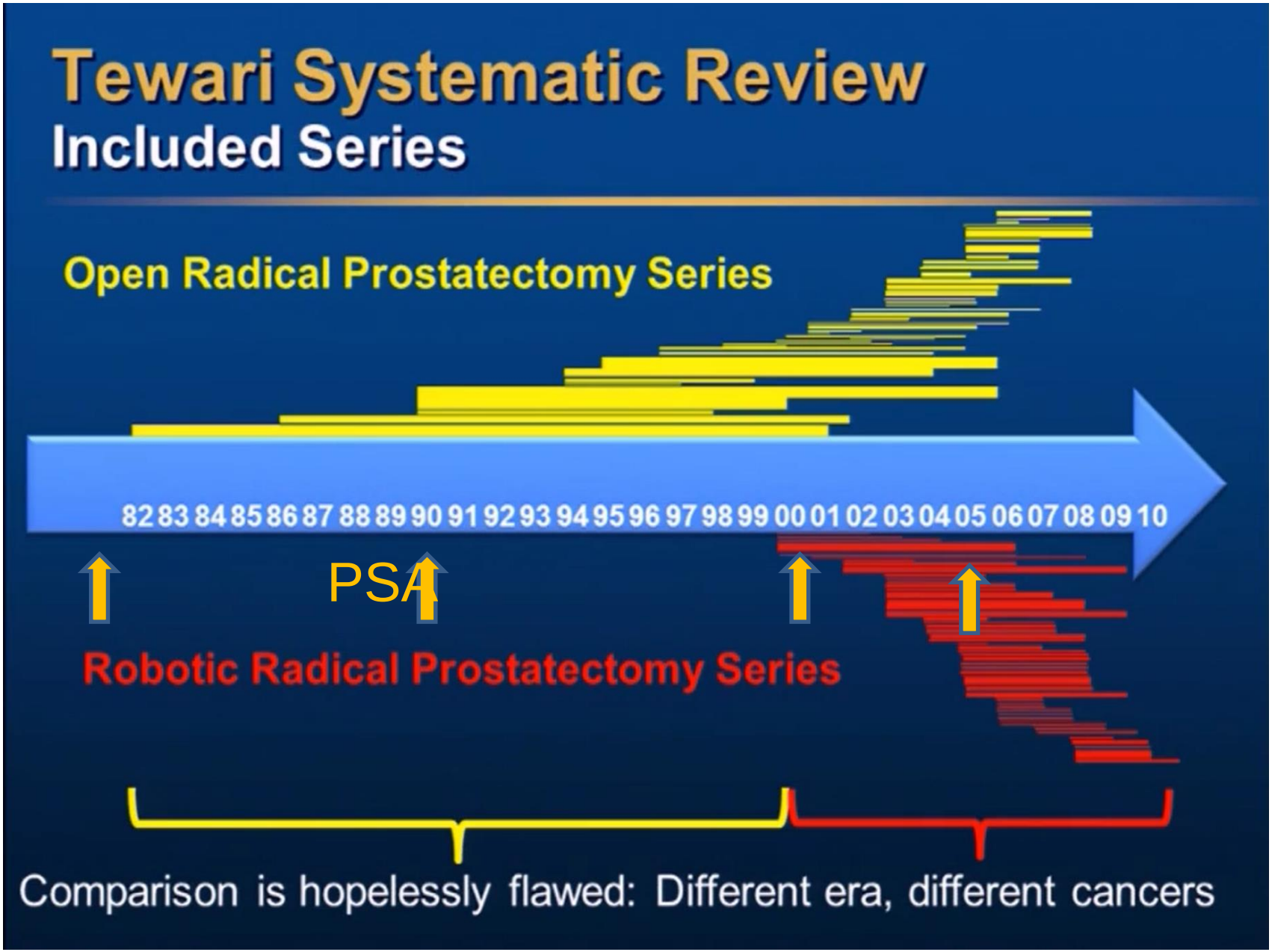
A Multinational, Multi-institutional Study Comparing Positive Surgical Margin Rates Among 22 393 Open, Laparoscopic, and Robot-assisted Radical Prostatectomy Patients

Prasanna Sooriakumaran[a,b,], Abhishek Srivastava[c], Shahrokh F. Shariat[d,e], Phillip D. Stricker[f], Thomas Ahlering[g], Christopher G. Eden[h], Peter N. Wiklund[b], Rafael Sanchez-Salas[i], Alexandre Mottrie[j], David Lee[k], David E. Neal[l,m], Reza Ghavamian[c], Peter Nyirady[n], Andreas Nilsson[b], Stefan Carlsson[b], Evanguelos Xylinas[d], Wolfgang Loidl[o], Christian Seitz[e], Paul Schramek[p], Claus Roehrborn[q], Xavier Cathelineau[i], Douglas Skarecky[g], Greg Shaw[m], Anne Warren[r], Warick J. Delprado[f], Anne-Marie Haynes[f], Ewout Steyerberg[s], Monique J. Roobol[s], Ashutosh K. Tewari[d]*

[a] *Surgical Intervention Trials Unit, Nuffield Department of Surgical Sciences, University of Oxford, Oxford, UK;* [b] *Department of Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden;* [c] *Department of Urology, Montefiore Medical Center, New York, NY, USA;* [d] *Department of Urology, Weill Cornell Medical College–New York Presbyterian Hospital, New York, NY, USA;* [e] *Department of Urology, Medical University of Vienna, Vienna, Austria;* [f] *Prostate Cancer Centre, St. Vincent's Clinic, Sydney, Australia;* [g] *Department of Urology, University of California–Irvine School of Medicine, Irvine, CA, USA;* [h] *Department of Urology, Royal Surrey County Hospital, Guildford, UK;* [i] *Department of Urology, L'Institut Mutualiste Montsouris, Paris, France;* [j] *Department of Urology, Onze-Lieve-Vrouwziekenhuis Hospital, Aalst, Belgium;* [k] *Department of Urology, University of Pennsylvania, Philadelphia, PA, USA;* [l] *Department of Uro-oncology, University of Cambridge, Cambridge, UK;* [m] *Uro-oncology Research Group, Cancer Research UK, Cambridge Research Institute, Cambridge, UK;* [n] *Department of Urology, Semmelweis University, Budapest, Hungary;* [o] *Department of Urology, St. Vincent's Hospital, Linz, Austria;* [p] *Department of Urology, Saint John of God Hospital, Vienna, Austria;* [q] *Department of Urology, University of Texas Southwestern Medical Center, Dallas, TX, USA;* [r] *Department of Histopathology, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK;* [s] *Department of Public Health, Erasmus MC–University Medical Center Rotterdam, Rotterdam, The Netherlands*



Nelson J, AUA Crossfire, 2014,



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European Association of Urology

Prostate Cancer

Satisfaction and Regret after Open Retropubic or Robot-Assisted Laparoscopic Radical Prostatectomy

Florian R. Schroeck, Tracey L. Krupski, Leon Sun, David M. Albala, Marva M. Price, Thomas

Duke Prostat

Abstract

Background: To counsel patients adequately, it is important to understand the variables influencing satisfaction and regret following prostatectomy.
Objective: To identify independent predictors for satisfaction and regret after radical prostatectomy.
Design, setting, and participants: Patients who had undergone retropubic radical prostatectomy (RRP) or robot-assisted laparoscopic radical prostatectomy (RALP) between 2000 and 2007 were mailed cross-sectional surveys composed of sociodemographic

Patients who underwent RALP were more likely to be regretful and dissatisfied, possibly because of higher expectation of an "innovative" procedure. We suggest that urologists carefully portray the risks and benefits of new technologies during preoperative counseling to minimize regret and maximize satisfaction.

95% CI, 0.37–0.91) and hormonal domain scores (OR, 0.67; 95% CI, 0.45–0.98), and years since surgery (OR, 1.63; 95% CI, 1.13–2.36) were again predictive ($p \leq 0.041$). African American race (OR, 3.58; 95% CI, 1.52–8.43) and lower bowel domain scores (OR, 0.73; 95% CI, 0.55–0.97) were also independently associated with regret ($p \leq 0.028$).
Conclusions: Sociodemographic variables and quality of life were important variables associated with satisfaction and regret. Patients who underwent RALP were more likely to be regretful and dissatisfied, possibly because of higher expectation of an "innovative" procedure. We suggest that urologists carefully portray the risks and benefits of new technologies during preoperative counseling to minimize regret and maximize satisfaction.

Schroeck FR et AL Eur Urlo 54 (2008) 785–793

PHASE 3 STUDY

Open versus RALRP

www.thelancet.com Published online July 26, 2016

Robot-assisted laparoscopic prostatectomy versus open radical retropubic prostatectomy: early outcomes from a randomised controlled phase 3 study

John W Yaxley, Geoffrey D Coughlin, Suzanne K Chambers, Stefano Occhipinti, Hema Samaratunga, Leah Zajdlewicz, Nigel Dunglison, Rob Carter, Scott Williams, Diane J Payton, Joanna Perry-Keene, Martin F Lavin, Robert A Gardiner

n= 326

	Range	Baseline			6 weeks		
		Radical retropubic prostatectomy (n=152)	Robot-assisted laparoscopic prostatectomy (n=153)	p value	Radical retropubic prostatectomy (n=136)	Robot-assisted laparoscopic prostatectomy (n=131)	p value
Primary							
Urinary function							
EPIC—urinary domain	0–100	88·79 (86·74–90·85)	88·50 (86·59–90·40)	0·83	74·50 (72·77–77·17)	71·10 (68·22–73·95)	0·09
Sexual function							
EPIC—sexual domain	0–100	59·80 (55·66–63·92)	62·95 (59·32–66·78)	0·25	30·70 (27·18–34·21)	32·70 (28·67–36·79)	0·45
Domain-specific QoL—IIEF total	0–75	43·96 (40·35–47·58)	46·65 (43·07–50·23)	0·30	23·75 (21·03–26·47)	25·63 (22·35–28·92)	0·38

Urinary function

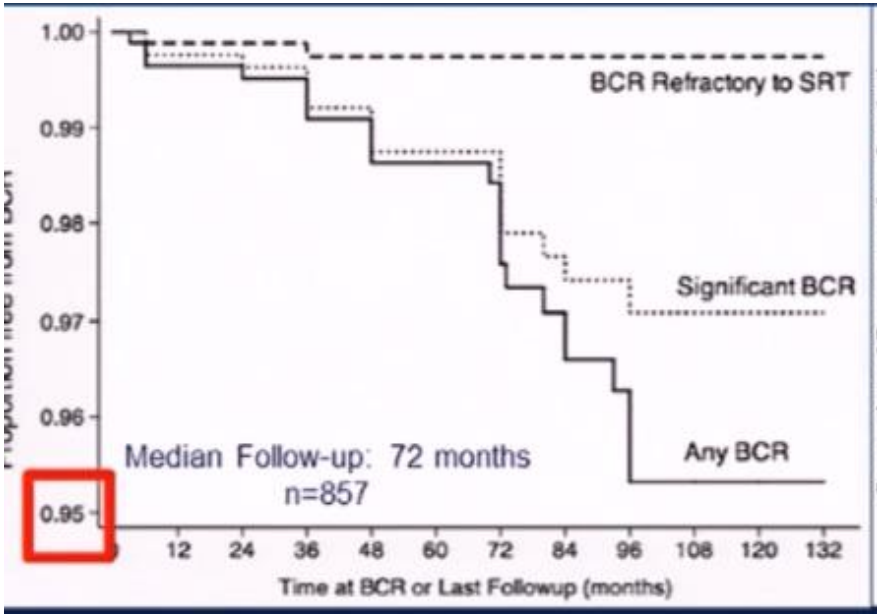
Sexual function

QoL

GLEASON 6 - ORRP

Biochemical recurrence

Lepor's series



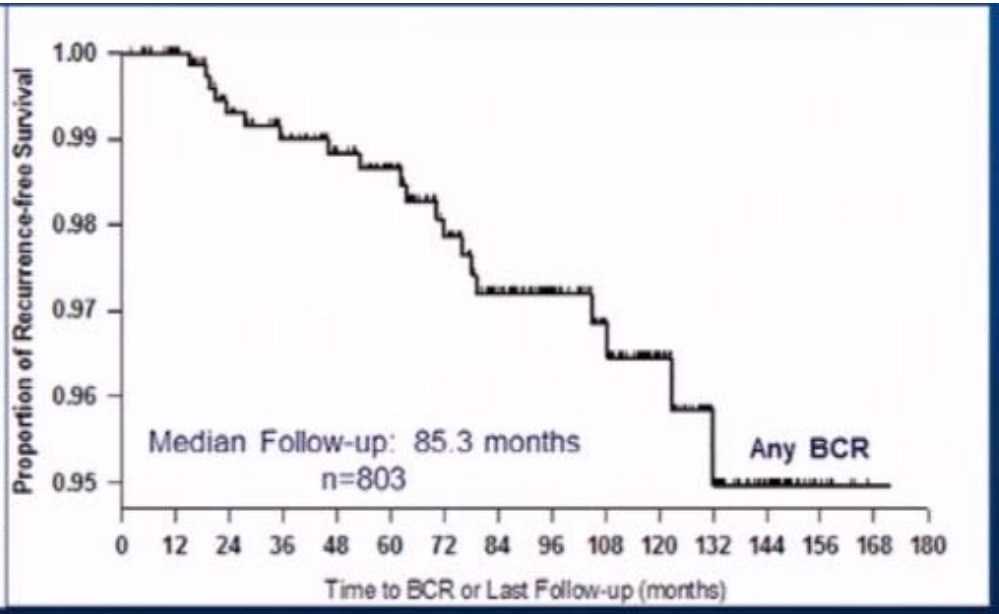
PSA Failure Rate

5 years: 1.6%

7 years: 3.4%

10 years: 4.7%

Nelson's series



PSA Failure Rate

5 years: 1.3%

7 years: 2.8%

10 years: 3.6%

RALRP X ORRP

Biochemical recurrence 5 years

GLEASON 6

RALRP		ORRP	
• Menon	12.5%	• Lepor	1,6%
• Suardi	10%	• Nelson	1.3%
• Karolinska	6%		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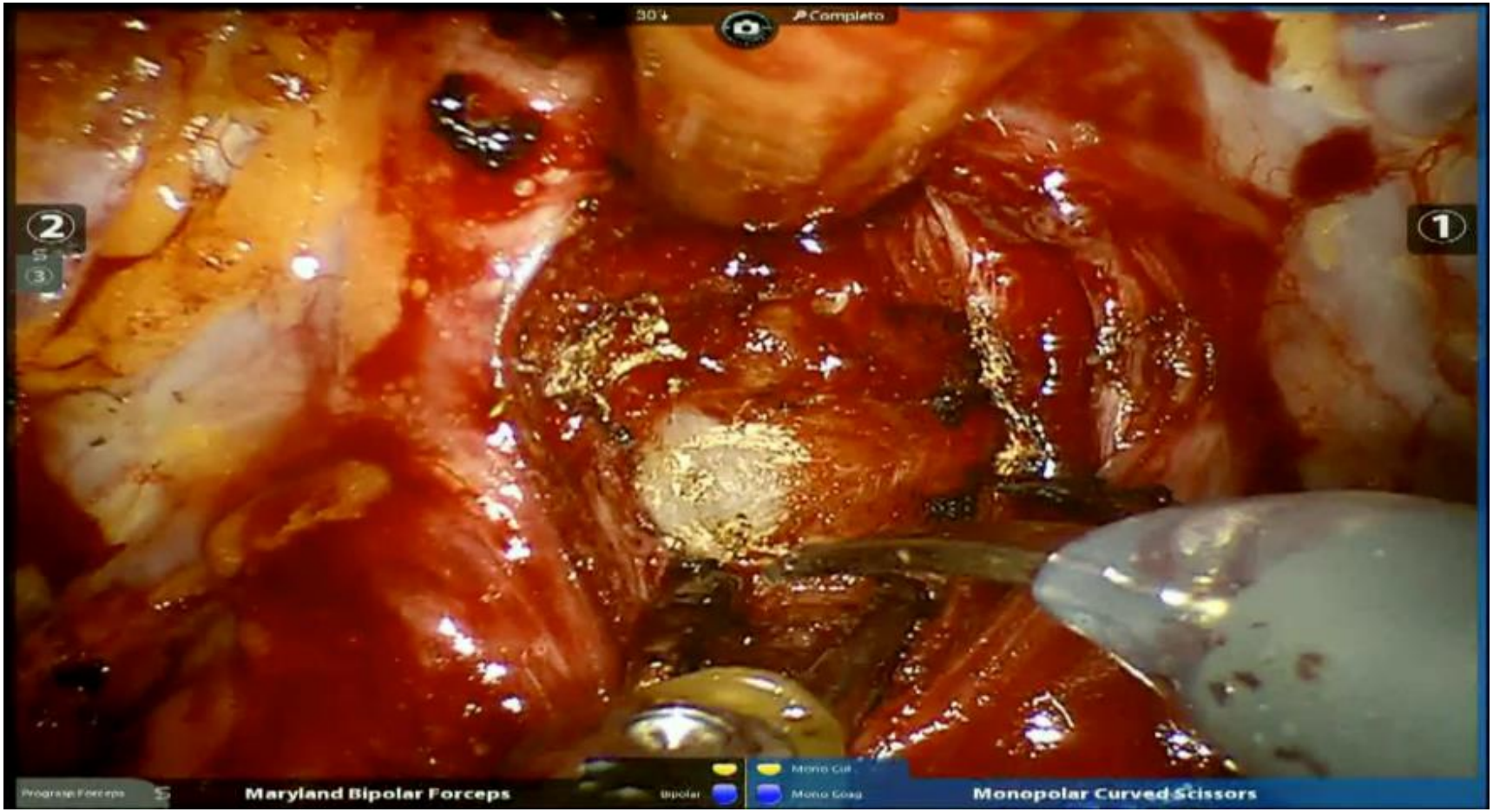
Conclusions

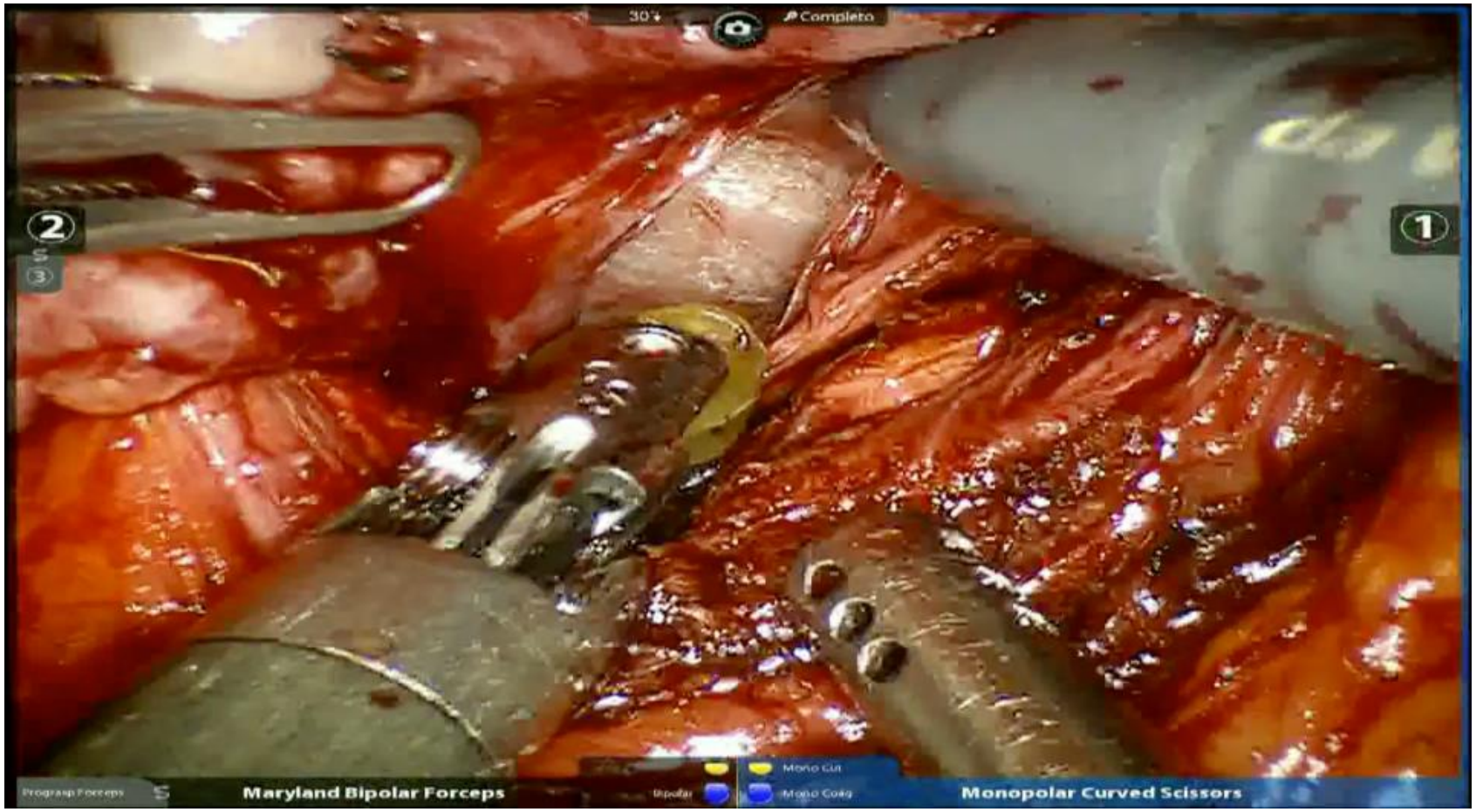
- RALRP did not improve short term outcomes
-
- ORRP is really a valid option
- Surgeon expertise is key to decision making (more important than the technique)
- Long term follow-up need to assess oncologic outcomes
- RALRP will show better results from now on
  - Reference centers and surgeons moved to robotics

The anterior bladder neck incised with the endopelvic fascia and the dorsal venous complex preserved

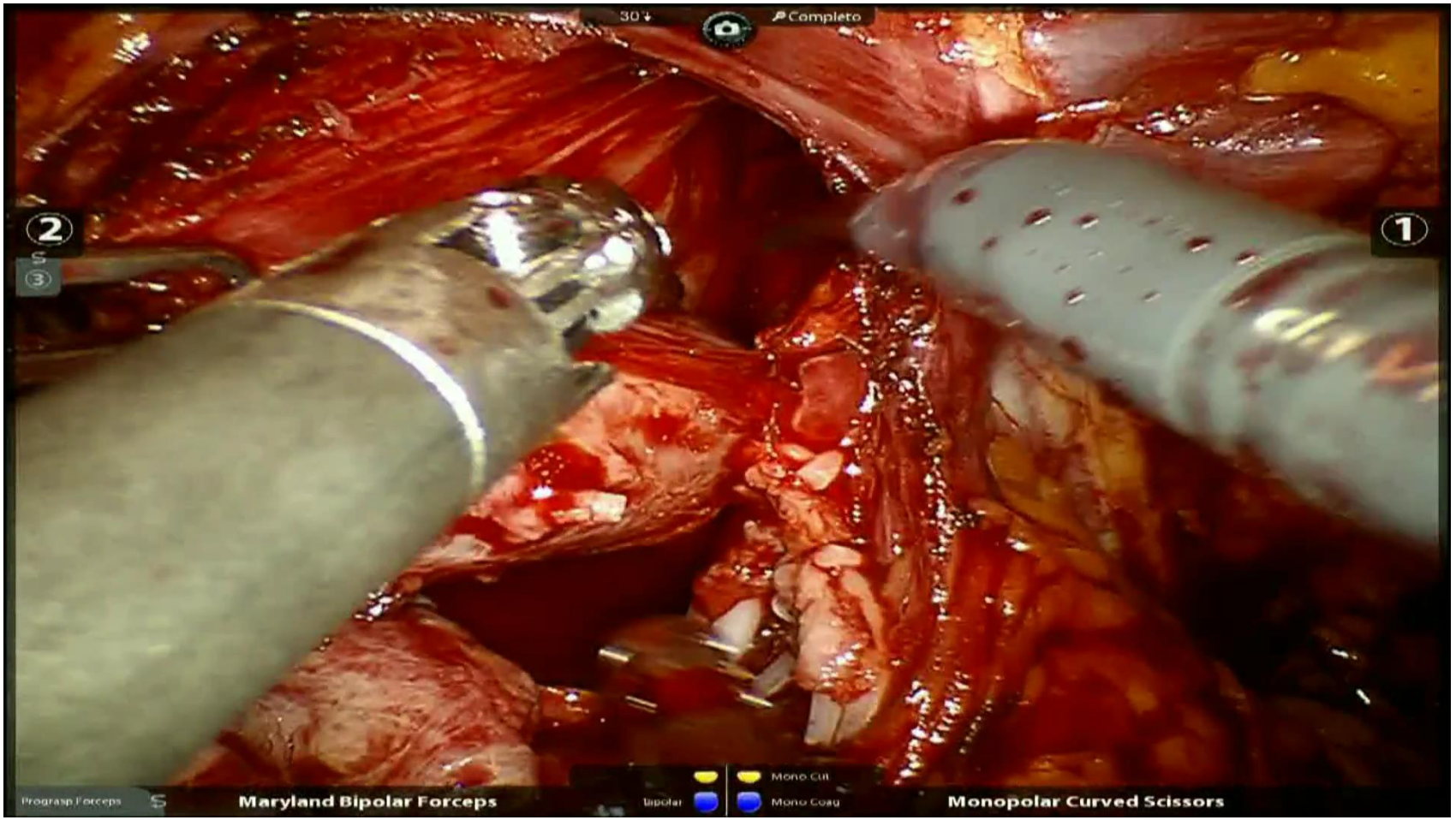
The posterior bladder neck is incised



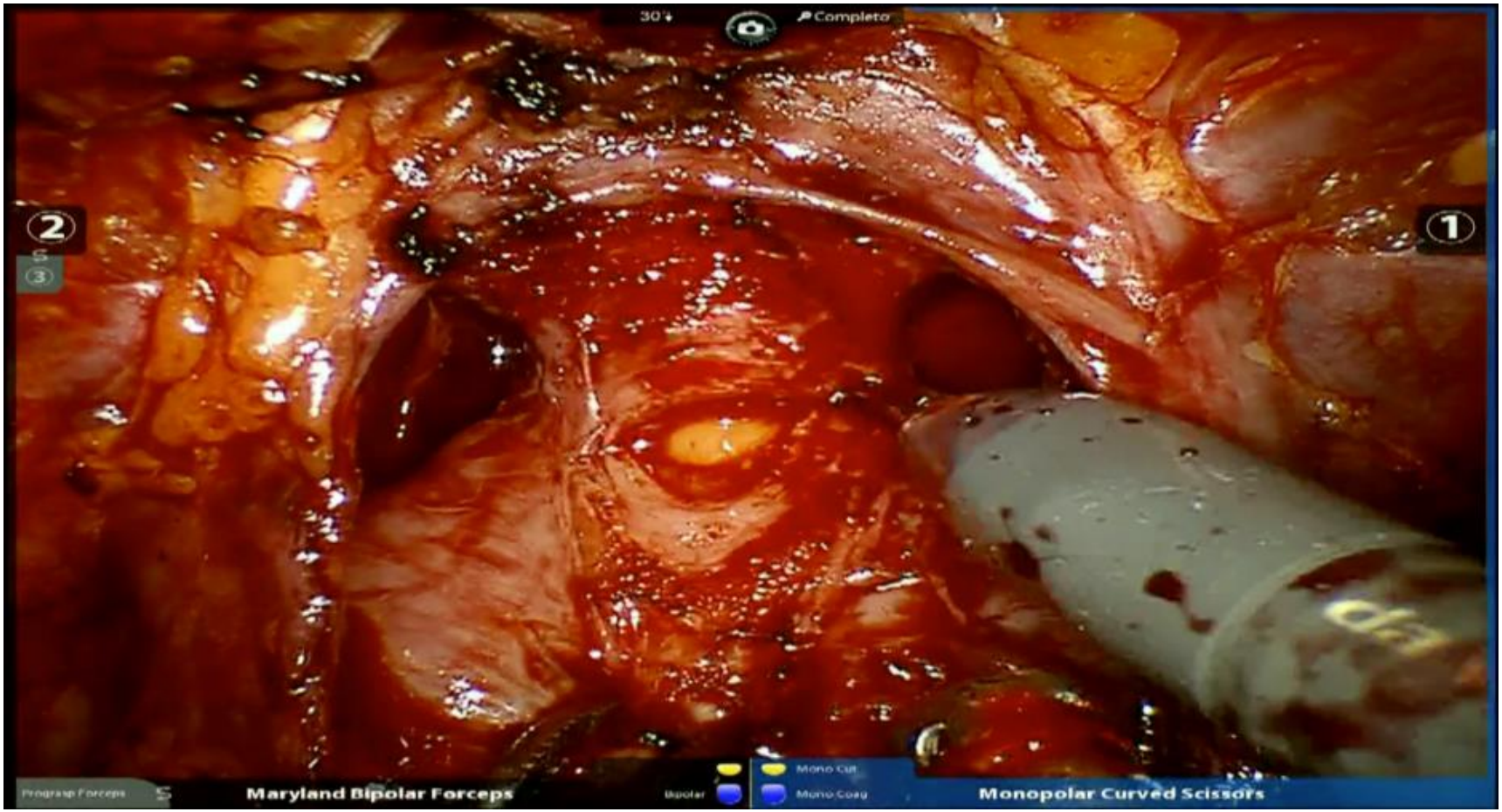
After the Denonvilliers' fascia is incised, the posterior plane of dissection is developed according the planned NS strategy



Dissection of the left neurovascular bundles before ligation of the prostatic pedicle

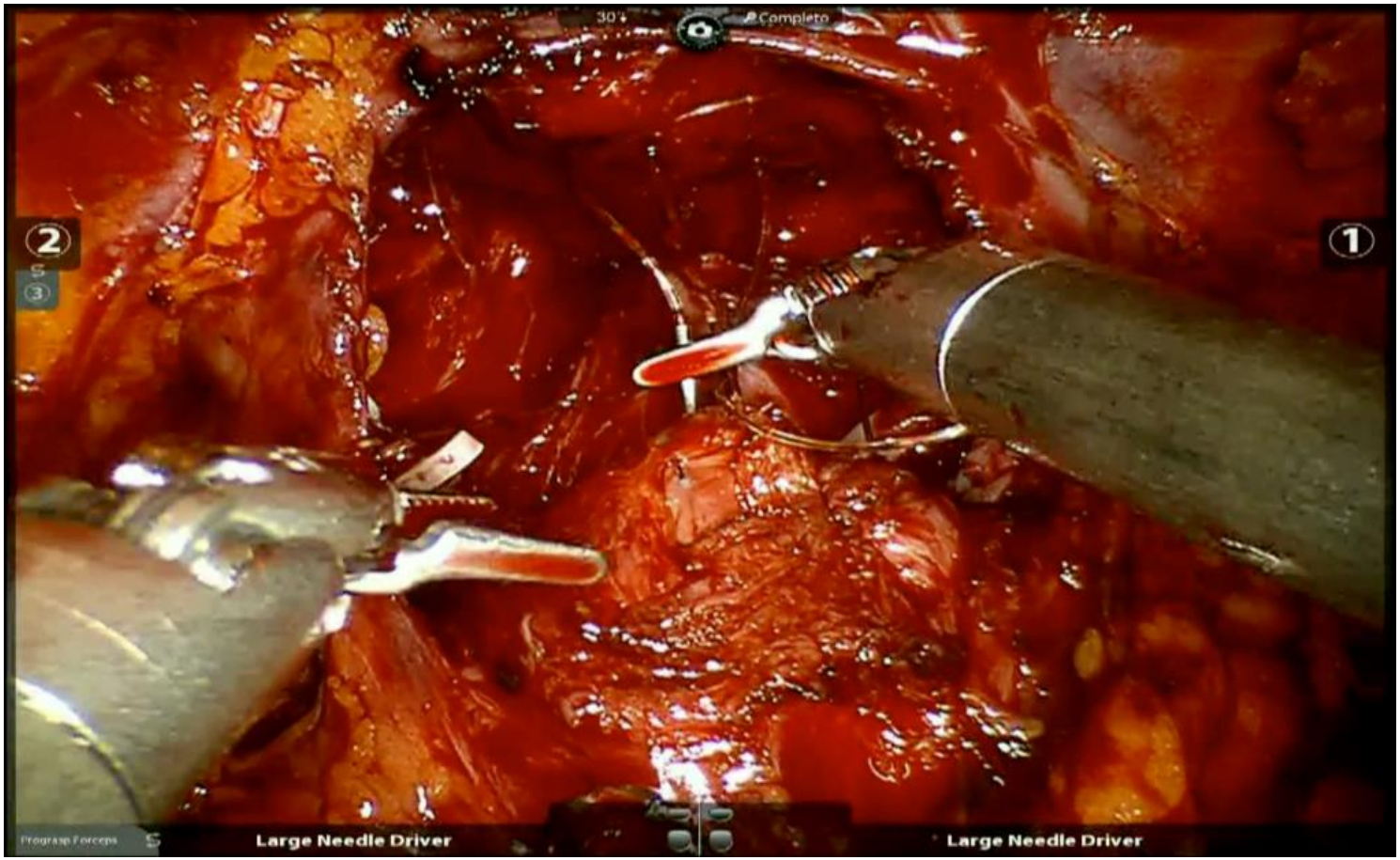


The dissected prostatic apex and the urethra being incised

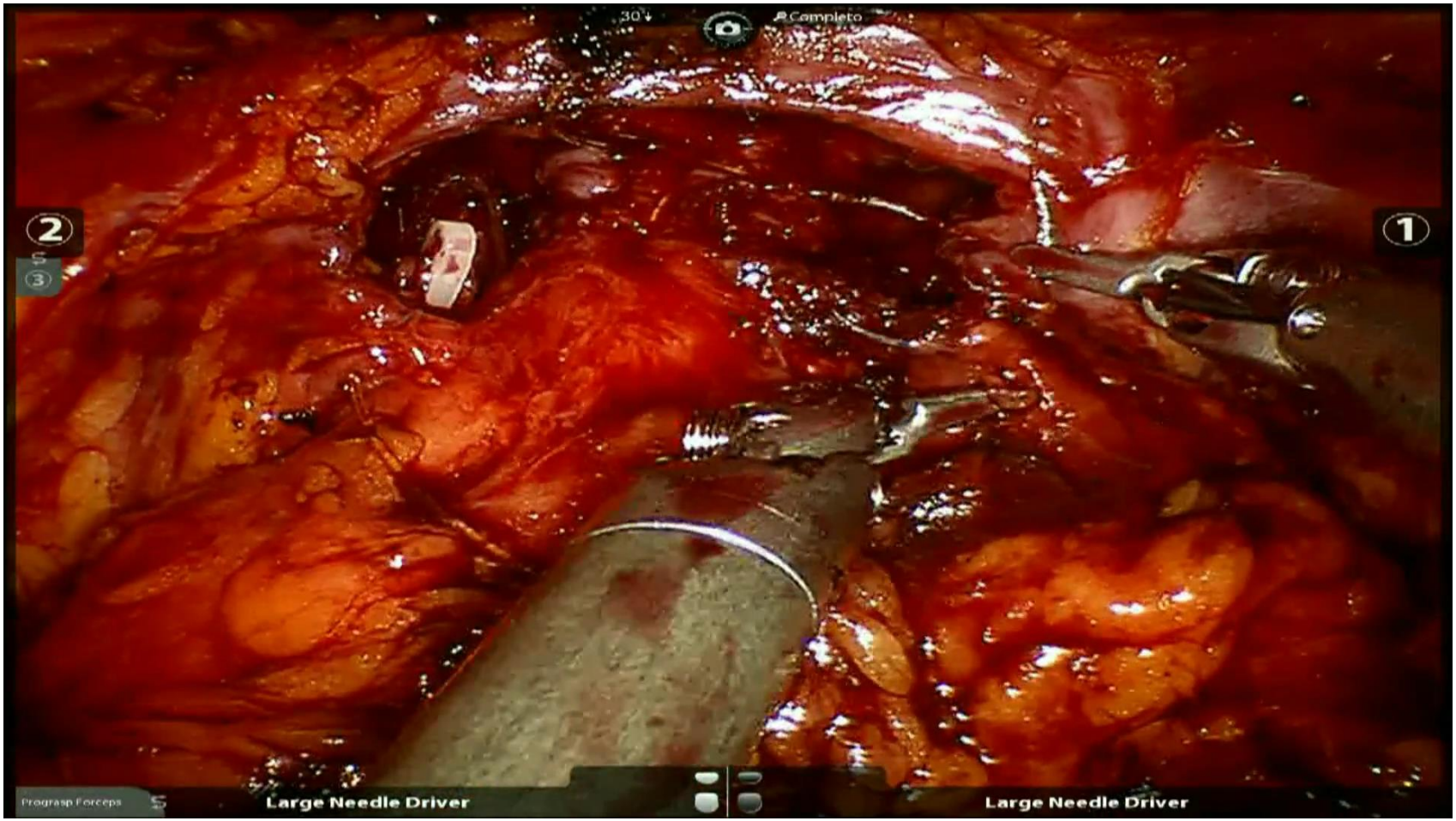


Final appearance after removal of the prostate

Vesico-urethral anastomosis (modified van Velthoven continuous suture)



The endopelvic fascia and periprostatic collar are reconstructed with a continuous suture



THANK YOU