



IX Congresso Internacional de Uro-Oncologia

IV SIMPÓSIO MULTIPROFISSIONAL DE URO-ONCOLOGIA

1 a 3 de Março de 2018

SHERATON SÃO PAULO WTC HOTEL

Cirurgia Minimamente Invasiva
PROSTATECTOMIA

COMPLICAÇÕES

Marcelo Langer Wroclawski

THE LANCET

Volume 388, No. 10049, p1057-1066, 10 September 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 Duglison, Rob Carter, Scott Williams, Diane J Payton, Joanna Perry-Keene, Martin F Lavin, Robert A Gardiner

- 151 ORP vs. 157 RALP
- ORP: 17 complicações em 14 pacientes (9%)
- RALP: 7 complicações em 6 pacientes (4%)

	Total (n=308)	Radical retropubic prostatectomy (n=151)	Robot-assisted laparoscopic prostatectomy (n=157)	p value
Perioperative outcomes				
Postoperative complications†	20, 24 (6%)	14, 17 (9%)	6, 7 (4%)	0.05
Grade I	10, 10 (3%)	6, 6 (4%)	4, 4 (3%)	--
Grade II	5, 6 (2%)	3, 4 (2%)	2, 2 (1%)	--
Grade IIIa	3, 3 (1%)	2, 2 (1%)	1, 1 (1%)	--
Grade IIIb	3, 3 (1%)	3, 3 (2%)	0, 0	--
Grade IIIc	2, 2 (<1%)	2, 2 (<1%)	0, 0	--

Prospective Evaluation With Standardised Criteria for Postoperative Complications After Robotic-Assisted Laparoscopic Radical Prostatectomy

Giacomo Novara, Vincenzo Ficarra*, Carolina D'Elia, Silvia Secco, Stefano Cavalleri, Walter Artibani



- 415 pacientes operados entre 2005 e 2009

- 102 complicações (22%) em 90 pacientes (nos 3 primeiros meses)

- 3% Clavien 3 ou 4

Table 1 – Characteristics of 415 patients analysed in the study

Variable	Cases
Age, yr, mean ± SD	62.3 ± 6.9
BMI, mean ± SD	26.2 ± 3.2
ECOG performance status 0, n (%)	401 (96.6)
Age-adjusted Charlson comorbidity index, mean ± SD	4 (3–4)
Diabetes mellitus, n (%)	27 (6.5)
Hypertension, n (%)	166 (40)
Prior ischaemic heart disease, n (%)	20 (4.8)
Prior abdominal surgery, n (%)	103 (24.8)
ASA score, n (%)	
I	90 (21.7)
II	208 (74.2)
III	17 (4.1)
Total PSA, ng/ml, median (IQR)	6.4 (4.6–8.4)
Prostate volume, ml, median (IQR)	35 (26–48.7)
Biopsy Gleason score, n (%)	
≤6	307 (74)
7	72 (17.3)
8–10	19 (4.5)
D'Amico risk group, n (%)	
Low	288 (69.4)
Intermediate	100 (24.1)
High	27 (6.5)
Surgeon, n (%)	
A	272 (65.5)
B	143 (34.5)
Nerve-sparing technique, n (%)	
Not performed	108 (26)
Unilateral	23 (5.5)
Bilateral	284 (68.4)
Lymphadenectomy, n (%)	81 (19.5)
Mean operative time, mean ± SD	184 ± 56
Intraoperative blood loss, median (IQR)	300 (150–400)
Cystography postoperative day, median (IQR)	4 (4–6)
Anastomosis at cystography, n (%)	
Watertight	335 (80.7)
Small leakage of contrast medium (<5%)	52 (12.5)
Large leakage of contrast medium (>5%)	28 (6.7)
Catheterisation time, median (IQR)	5 (4–7)
In-hospital length of stay, median (IQR)	6 (5–7)

Table 2 – Complications observed in the evaluated patients

Category (% of total)	Complication	Frequency	
Bleeding (7.7%; n = 32)	Postoperative transfusion [†]	22	
	Pelvic haematoma	10	
Gastrointestinal (1.7%; n = 7)	Constipation [‡]	1	
	Bowel perforation	1	
	Intraoperative rectal injury	5	
	Urinary retention	6	
Genitourinary (9.4%; n = 39)	Urinoma	2	
	Urethral stenosis	1	
	Anastomosis dehiscence	3	
	Gross haematuria	2	
	Lymphorrhoea [§]	18	
	Lymphocele	5	
	Unintentional self-removal of the catheter	1	
Wound (0.2%; n = 1)	Entrapment of the catheter within anastomosis suture	1	
	Wound infection	1	
	Pulmonary (0.2%; n = 1)	Acute respiratory distress syndrome	1
		Infectious (1.4%; n = 6)	Fever of unknown origin [¶]
	Cardiac (0.7%; n = 3)		Arrhythmia
		Myocardial infarction	1
Thromboembolic (0.2%; n = 1)	Thrombosis of the external jugular vein	1	
	Neurologic (1.2%; n = 5)	Peripheral neuropathy	4
Delirium/agitation		1	
Miscellaneous (1.6%; n = 7)	Intraoperative vascular injury	2	
	Acute renal failure	1	
	Technical problem with da Vinci system	2	
	Conversion to open surgery	2	

Complicações Hemorrágicas

Sangramento

- Origem → maioria venosa → auto-limitado
 - Leito prostático
 - Vasos ilíacos (Linfadenectomia)
 - Trocater → epigástrica inferior
- Extra melhor que trans?
- Sangramento arterial, hemorragia persistente, lesão de grandes vasos → INTERVENÇÃO

THE LANCET

Volume 388, No. 10049, p1057-1066, 10 September 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 Duglison, Rob Carter, Scott Williams, Diane J Payton, Joanna Perry-Keene, Martin F Lavin, Robert A Gardiner

- 151 ORP vs. 157 RALP

	Total (n=308)	Radical retropubic prostatectomy (n=151)	Robot-assisted laparoscopic prostatectomy (n=157)	p value
Perioperative outcomes				
Operative duration				
Surgery, min	217.97 (47.63)	234.34 (37.07)	202.03 (51.36)	<0.0001
Recovery, min*	107.54 (111.64)	107.12 (146.63)	107.94 (61.18)	0.95
Operating room, min	253.00 (49.79)	280.37 (35.35)	246.08 (55.12)	<0.0001
Intraoperative adverse event	15 (5%)	12 (8%)	3 (2%)	0.02
Estimated total blood loss, mL	886.54 (645-62)	1338.14 (591-47)	443.74 (294-29)	<0.0001
Blood transfusions				
Non-autologous intraoperative	0	0	0	-
Non-autologous postoperative	7 (2%)	6 (4%)	1 (1%)	0.12

- 916 prostatectomias retropúbicas (2000-2004)
- Sangramento maciço em 15 (1,6%)
 - 5 reoperações (grupo 1)
 - Desfeita anastomose, drenado hematoma, controle da hemostasia, refeita anastomose
 - 10 observações (grupo 2)

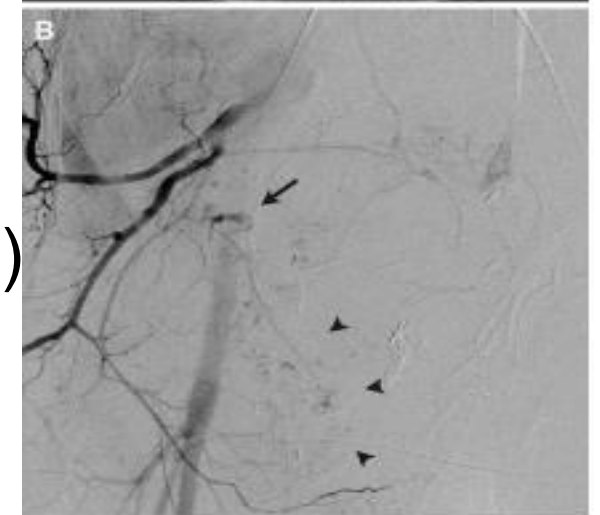
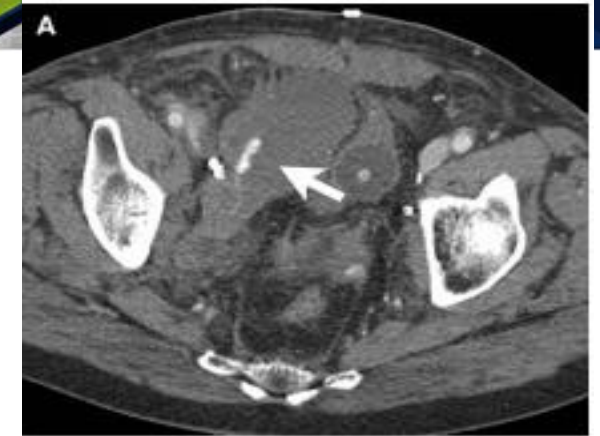
TABLE II. *Postoperative outcomes*

Outcomes	Group 1	Group 2	Groups 1 + 2	P Value
Hematocrit before first transfusion	24.0 ± 2.3	23.9 ± 0.6	23.9 ± 2.4	0.96
Allogeneic units transfused (n)	7.4 ± 0.9	4.1 ± 0.3	5.2 ± 2.2	0.002*
Length of stay (days)	4.6 ± 0.5	2.6 ± 0.3	3.2 ± 1.4	0.005*
Moderate to severe extravasation on initial cystogram (%)	0	70	46.6	0.02*
No extravasation by POD 10 (%)	60	20	33	0.25
Duration of catheter drainage (days)	9.6 ± 1.2	23.5 ± 3.9	18.8 ± 12.1	0.03*
Continent at 12 mo (%)	100	50	69.2	0.10
Anastomotic stricture (%)	40	22	28.5	0.58
Potent at 24 mo (%)	50	40	44	1.00

Endovascular Management of Severe Arterial Haemorrhage After Radical Prostatectomy: A Case Series

Lawrence Bonne¹ · Patrick Gillardin¹ · Liesbeth De Wever¹ · Els Vanhoutte¹ · Steven Joniau² · Raymond Oyen¹ · Geert Maleux¹

- 10 casos de sangramento em 1403 prostates (0,71%)
 - 8 abertas/ 2 robóticas
- Tratamento endovascular (1,5 dias após prostatectomia)
 - Embolização (9 casos)
 - Ramo lateral da a. pudenda → 4 casos
 - A. vesical inferior → 2 casos
 - A. vesical superior → 1 caso
 - Ramo prostático da a. glútea inferior → 1 caso
 - Ramo anterior da a. ilíaca interna → 1 caso
 - Stent (1 caso) → lesão de a. ilíaca externa
- 1 caso precisou ser operado




Complicações Linfáticas

Linfocele

- Clínica → sintomas
- Sub-clínica/radiológica → assintomático
- Patofisiologia
 - Vasos linfáticos abertos → Linforrêia → Linfocele (cápsula fibrótica)
 - Rara em cistectomias sem linfadene → qual o papel da bexiga?



Incidence of lymphoceles after robot-assisted pelvic lymph node dissection

Marcelo A. Orvieto , Rafael F. Coelho, Sanket Chauhan, Kenneth J. Palmer, Bernardo Rocco, Vipul R. Patel

First published: 12 April 2011 [Full publication history](#)

DOI: [10.1111/j.1464-410X.2011.10094.x](https://doi.org/10.1111/j.1464-410X.2011.10094.x) [View/save citation](#)



[View issue TOC](#)
Volume 108, Issue 7
October 2011
Pages 1185–1189

Mean (range) follow-up, weeks	10.8 (7–14)
Median (range) lymph node yield	6 (2–12)
Incidence of positive lymph nodes, <i>n/N</i> (%)	6/76 (7.89)
Overall lymphocele incidence, <i>n/N</i> (%)	39/76 (51)
Unilateral lymphoceles, <i>n/N</i> (%)	32/39 (82)
Bilateral lymphoceles, <i>n/N</i> (%)	7/39 (18)
Incidence of symptomatic lymphoceles, <i>n/N</i> (%)	6/76 (7.9)
Symptomatic lymphoceles, <i>n/N</i> (%)	6/39 (15.4)
Pelvic pressure	5
Fevers	1
Ileus	3
Leg pain/weakness	1
CVA tenderness	1
Lymphocele size, cm	4.3 (1.5–12.3)
Mean (range)	41
<4 cm (%)	53.9
4–10 cm (%)	5.1
>10 cm (%)	
Incidence of intervention* required, <i>n/N</i> (%)	1/76 (1.3)

TABLE 3

Frequency and location of lymphoceles

*CT-guided placement of JP drain.

Prostate Cancer

Complications and Other Surgical Outcomes Associated with Extended Pelvic Lymphadenectomy in Men with Localized Prostate Cancer

Alberto Briganti^{a,b}, Felix K.-H. Chun^b, Andrea Salonia^a, Nazareno Suardi^a, Andrea Gallina^a, Luigi Filippo Da Pozzo^a, Marco Roscigno^a, Giuseppe Zanni^a, Luc Valiquette^b, Patrizio Rigatti^a, Francesco Montorsi^a, Pierre I. Karakiewicz^{b,*}

^a Department of Urology, Vita-Salute University, Milan, Italy

^b Cancer Prognostics and Health Outcomes Unit, University of Montreal, Canada

- 1033 PRR + LND
 - 767 (79%) → >10 LND → eLDN
 - 196 (20,4%) → < 10 LND → ILDN

Variables	All patients (no. [%])	Patients subjected to ePLND (no. [%])	Patients subjected to lPLND (no. [%])	p value
Overall complications	168 (17.4)	152 (19.8)	16 (8.2)	<0.001
Lymphocele	88 (9.1)	79 (10.3)	9 (4.6)	0.01
Deep venous thrombosis	7 (0.7)	6 (0.8)	1 (0.5)	0.6
Pelvic haematoma	6 (0.6)	5 (0.7)	1 (0.5)	0.6
Fever	17 (1.7)	16 (2.1)	1 (0.5)	0.2
Acute urinary retention	4 (0.4)	4 (0.5)	0	0.05
Urinary anastomotic leakage	26 (2.7)	24 (3.1)	2 (1)	0.07
Surgical reintervention for pelvic haematoma	4 (0.4)	3 (0.4)	1 (0.5)	0.8
Ultrasound-guided percutaneous drainage	5 (0.5)	4 (0.5)	1 (0.5)	1.0
Pulmonary embolism	1 (0.1)	1 (0.1)	0	0.6
Ureteral injury	0	0	0	NA
Others	15 (1.5)	13 (1.7)	2 (1)	0.7

ePLND: extended pelvic lymph node dissection; lPLND: limited pelvic lymph node dissection; NA: not available.

Predictors of symptomatic lymphocele after radical prostatectomy and bilateral pelvic lymph node dissection

Geoffrey T Gotto, Luis Herran Yunis, Bertrand Guillonneau, Karim Touijer, James A Eastham, Peter T Scardino, Farhang Rabbani ✉

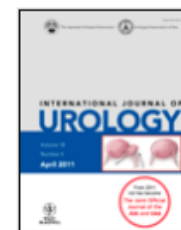
First published: 10 February 2011 Full publication history

DOI: 10.1111/j.1442-2042.2010.02710.x View/save citation

- 4173 ORP ou LRP (1999 – 2007)
- Imagem só se sintomas
- 164 linfoceles (4%)

Table 3 Predictors of symptomatic lymphocele on multivariate Cox proportional hazards analysis

Predictor	Univariate analysis		Multivariate analysis	
	Hazard ratio (95% CI)	P-value	Hazard ratio (95% CI)	P-value
Prophylactic LMWH	1.7 (1.4–2.0)	<0.001	6.7 (1.5–30.1)	0.013
No. nodes removed	1.03 (1.01–1.05)	0.004	1.02 (1.002–1.046)	0.031
No. drains (2 vs 1)	1.1 (0.8–1.6)	0.44	1.2 (0.9–1.7)	0.19
RP approach (LRP vs ORP)	2.6 (1.9–3.7)	<0.001	0.40 (0.09–1.8)	0.24
Age	1.0 (0.98–1.02)	0.98		
BMI	1.0 (0.96–1.04)	0.97		
Ethnicity (AA vs Caucasian)	1.4 (0.8–2.4)	0.21		
Modified Charlson score	1.03 (0.9–1.2)	0.70		
Log (PSA)	1.1 (0.9–1.5)	0.24		
Pathological non-organ confined	1.1 (0.8–1.5)	0.55		
Pathological Gleason score:				
7 vs 2–6	1.2 (0.9–1.7)	0.25		
8–10 vs 2–6	1.1 (0.6–2.1)	0.78		
No. positive nodes	1.14 (1.00–1.29)	0.056		
Nodes sent as packets	0.93 (0.58–1.49)	0.78		



View issue TOC
Volume 18, Issue 4
April 2011
Pages 291–296

Table 2 Characteristics of 164 patients with symptomatic lymphocele

Characteristic	n (%)
Symptoms	
Fever	77 (47%)
Leukocytosis	41 (25%)
Swelling	
Lower extremity	60 (37%)
Penile/scrotal	41 (25%)
Abdominal	14 (9%)
Pain	
Abdominal	65 (40%)
Groin	36 (22%)
Back	10 (6%)
Flank	8 (5%)
Lower extremity weakness	1 (0.6%)
Voiding complaints	
Urinary retention	14 (9%)
Urinary frequency	2 (1%)
Dysuria	1 (0.6%)
Increased drain output	6 (4%)
Laterality	
Right	63 (38%)
Left	49 (30%)
Bilateral	44 (27%)
Unspecified	8 (5%)
Size	
Median (IQR)	5 (4,7)

Rate of Symptomatic Lymphocele Formation After Extraperitoneal vs Transperitoneal Robot-Assisted Radical Prostatectomy and Bilateral Pelvic Lymphadenectomy

David Horovitz, Xiang Lu, Changyong Feng, Edward M. Messing, Jean Joseph

Journal of Endourology. Oct 2017, 31(10): 1037-1043.



Prospective Randomized Trial Comparing Titanium Clips to Bipolar Coagulation in Sealing Lymphatic Vessels During Pelvic Lymph Node Dissection at the Time of Robot-assisted Radical Prostatectomy

Pietro Grande, Giovanni Battista Di Piero, Livio Mordasini, Matteo Ferrari, Christoph Würnschimmel, Hansjörg Danuser, Agostino Mattei

February 2017 Volume 71, Issue 2, Pages 155-158



- 671 eRALP vs. 671 tRALP (p=0,09)
 - eRALP → 2,83% linfocele sintomática
 - tRALP → 1,49% linfocele sintomática

Table 2 – Surgical and clinicopathologic data

	Total cohort	Group A (clips)	Group B (no clips)	Group difference, % (95% CI)	p value
Mean operation time, min (SD)	243.2 (39.7)	240.9 (42.9)	245.4 (36.5)		0.2
Attempted NS, n (%)					0.1
Monolateral	85 (39)	50 (45)	35 (32)		
Bilateral	66 (30)	28 (25)	38 (35)		
Pathologic stage, n (%)					0.2
T2	152 (69)	80 (73)	72 (65)		
T3	68 (31)	30 (27)	38 (34)		
Dissected LNs, mean n (SD)	20.1 (8.2)	20.8 (8.8)	19.4 (7.4)		
Positive LNs, n (%)	39 (18)	18 (16)	21 (19)		0.1
Pathologic Gleason score, n (%)					0.9
≤6	6 (3)	3 (3)	3 (3)		
7	165 (75)	83 (75)	82 (74)		
≥8	49 (22)	24 (22)	25 (23)		
Mean length of stay, d (SD)	6.4 (2.7)	6.1 (1.8)	6.7 (3.4)		
Lymphocele, n (%)					
Overall	105 (48)	52 (47)	53 (48)	-0.91 (-2.6 to 0.7)	0.9
At 10-d follow-up	101 (46)	48 (44)	53 (48)	-4.6 (-18 to 9)	0.5
Symptomatic	11(5)	6 (5)	5 (4)	0.75 (0.1 to 3.2)	0.7
Lymphocele location, n (%)					
Monolateral	76 (72)	37 (71)	39 (74)	-2.4 (-14 to 8.9)	0.7
Bilateral	29 (28)	15 (29)	14 (26)	2.6 (-9 to 11.3)	0.9
Mean lymphocele volume, ml (SD)	32.6 (35.5)	30.3 (32.0)	34.8 (38.7)		0.6



November 2009 Volume 182, Issue 5, Pages 2285–2290

The Use of a Surgical Patch in the Prevention of Lymphoceles After Extraperitoneal Pelvic Lymphadenectomy for Prostate Cancer: A Randomized Prospective Pilot Study

Alchiede Simonato,* Virginia Varca, Marco Esposito, Fabio Venzano and Giorgio Carmignani

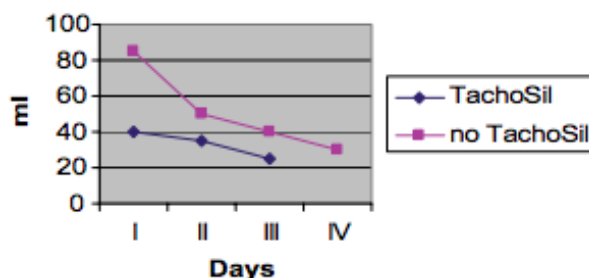
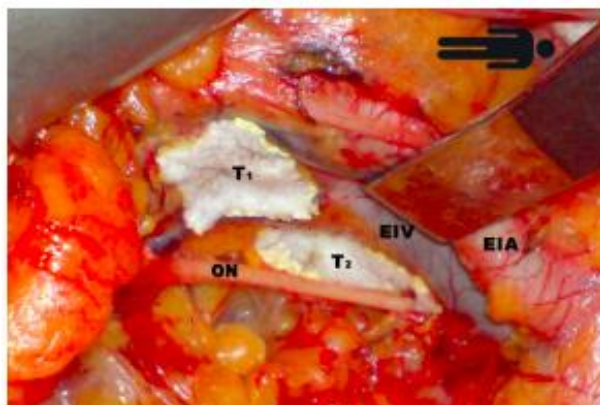


Table 4. Comparison of percentage of lymphoceles

	Group 1 No./Total No. (%)	Group 2 No./Total No. (%)	p Value
Symptomatic	2/30 (6.7)	10/30 (33.3)	0.011412
Asymptomatic	3/30 (10)	9/30 (30)	0.0455
Totals	5/30 (16.7)	19/30 (63.3)	0.001319

FloSeal Reduces the Incidence of Lymphoceles After Lymphadenectomies in Laparoscopic and Robot-Assisted Extraperitoneal Radical Prostatectomy

Matthias Waldert, Mesut Remzi, Tobias Klatt, Hans Christoph Klingler
Journal of Endourology. Jun 2011, 25(6): 969-973.

TABLE 1. PATIENT CHARACTERISTICS

	FloSeal group (n=32)	Non-FloSeal group (n=110)	P value
Symptomatic lymphoceles, n (%)	1 (3.1%)	16 (14.5%)	0.149

TABLE 2. ECONOMIC ANALYSIS

Cost element	No/cost	
	FloSeal group (n=32)	Non-FloSeal group (n=110)
FloSeal	32/€6976 (\$9662)	0/€0
CT scan	1/€305 (\$421)	16/€4880 (\$6731)
Percutaneous puncture	1/€200 (\$276)	10/€2000 (\$2759)
Hospitalization days	3/€3000 (\$4138)	45/€45,000 (\$62,084)
Laparoscopic fenestration	0/€0	6/€9000 (\$12,415)
Overall costs	€10,481 (\$14,559)	€60,880 (\$84,551)
Mean cost per patient	€327 (\$455)	€553 (\$760)



Novel Technique Prevents Lymphoceles After Transperitoneal Robotic-assisted Pelvic Lymph Node Dissection: Peritoneal Flap Interposition

June 2015 Volume 85, Issue 6, Pages 1505–1509

Christopher Lebeis, David Canes, Andrea Sorcini, and Alireza Moinzadeh

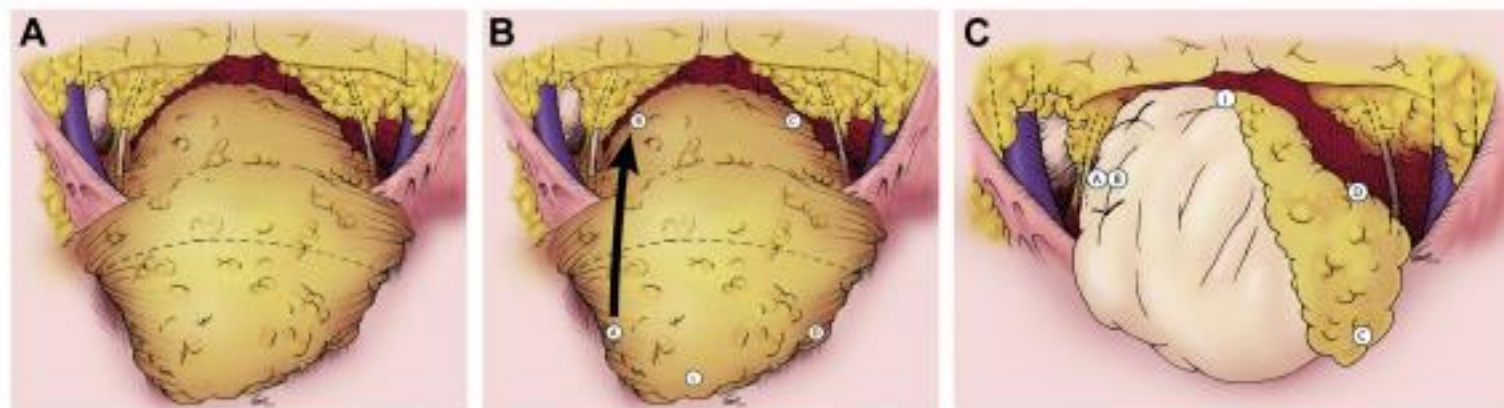
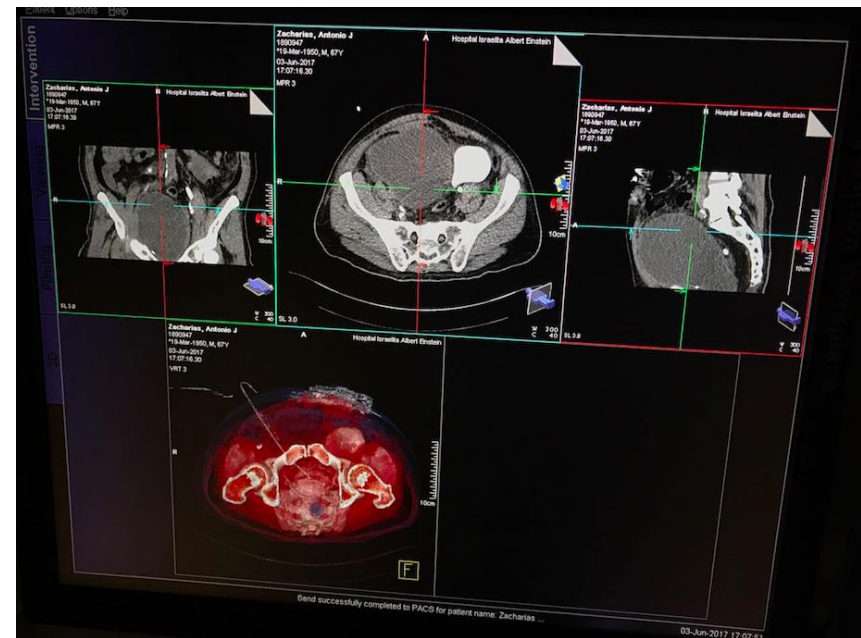
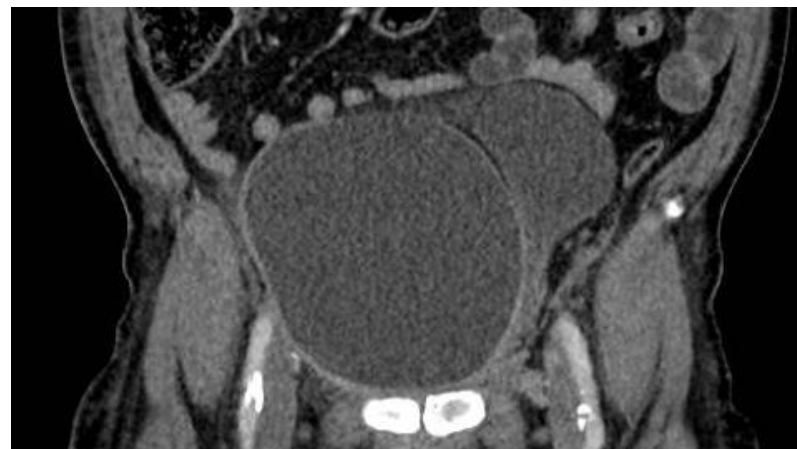


Table 2. Patient complications

Complications	Group A, n (%)	Group B, n (%)	P Value*
Lymphocele	9 (11.6)	0 (0)	.0033
Procedure for lymphocele	9 (11.6)	0 (0)	.0033
Wound infection	2 (2.59)	4 (5.71)	.4246
Cerebrovascular accident	1 (1.29)	0 (0)	1.0000
Scrotal pain	0 (0)	1 (1.42)	.4762
Urinary tract infection	2 (2.59)	1 (1.42)	1.0000
Superficial bleed	0 (0)	1 (1.42)	.4762
Urinary leak	5 (6.49)	3 (4.28)	.7215
Deep vein thrombosis	3 (3.89)	0 (0)	.2466
Ileus	0 (0)	1 (1.42)	.4762
Urinary retention	1 (1.29)	0 (0)	1.0000

Punção e Drenagem



Polidocanol foam sclerotherapy is a new and effective treatment for post-operative lymphorrhoea and lymphocele

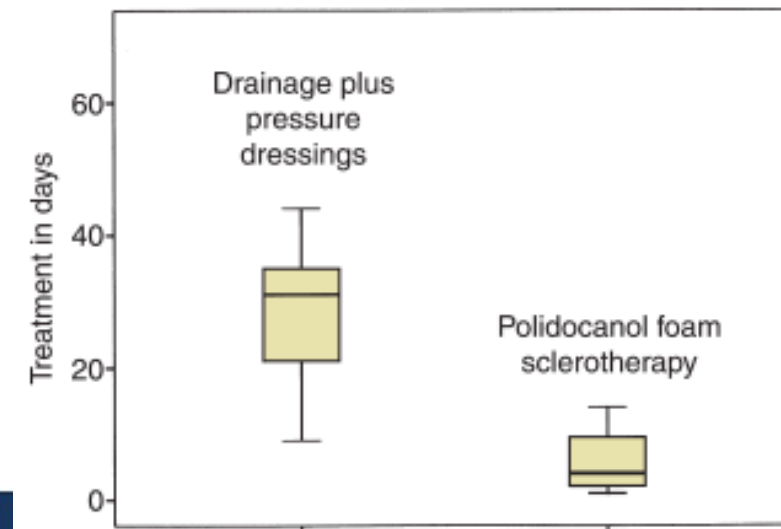
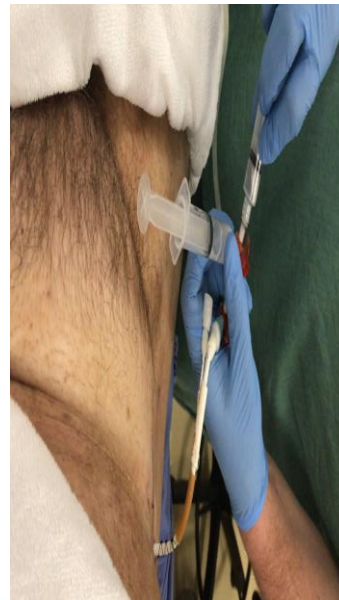
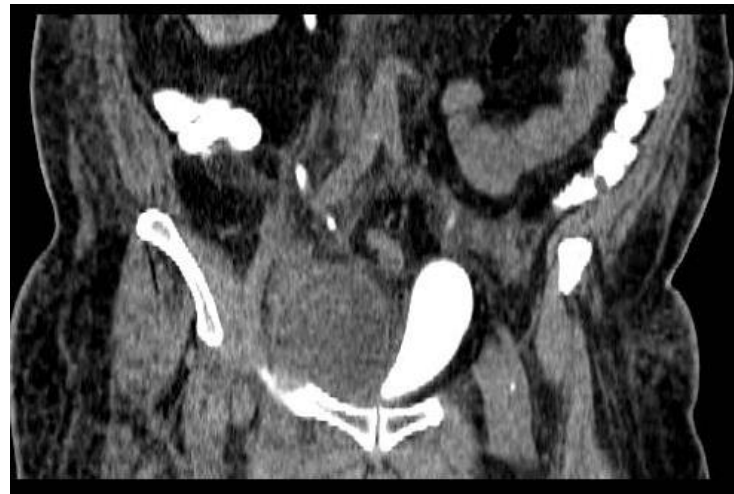
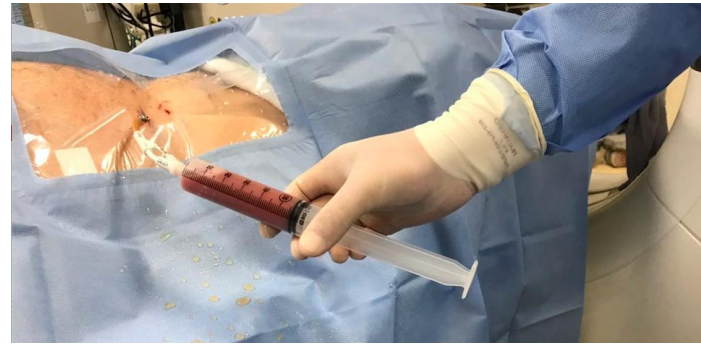
J Klode [✉](#), K Klötgen, A Körber, D Schadendorf, J Dissemond

First published: 11 January 2010 [Full publication history](#)

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Volume 24, Issue 8
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Laparoscopic Marsupialization of Lymphocele after Laparoscopic Lymph Node Dissection

MARK L. FALLICK, JOHN P. LONG

Journal of Endourology. Mar 2009, 10(6): 533-534.

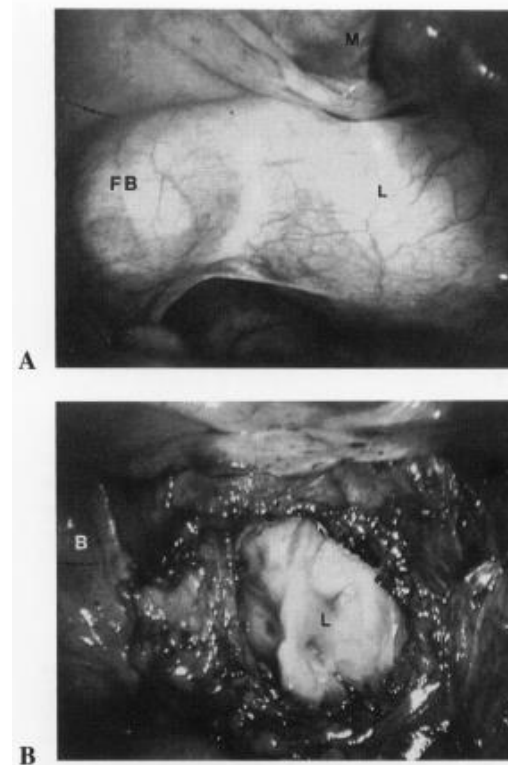
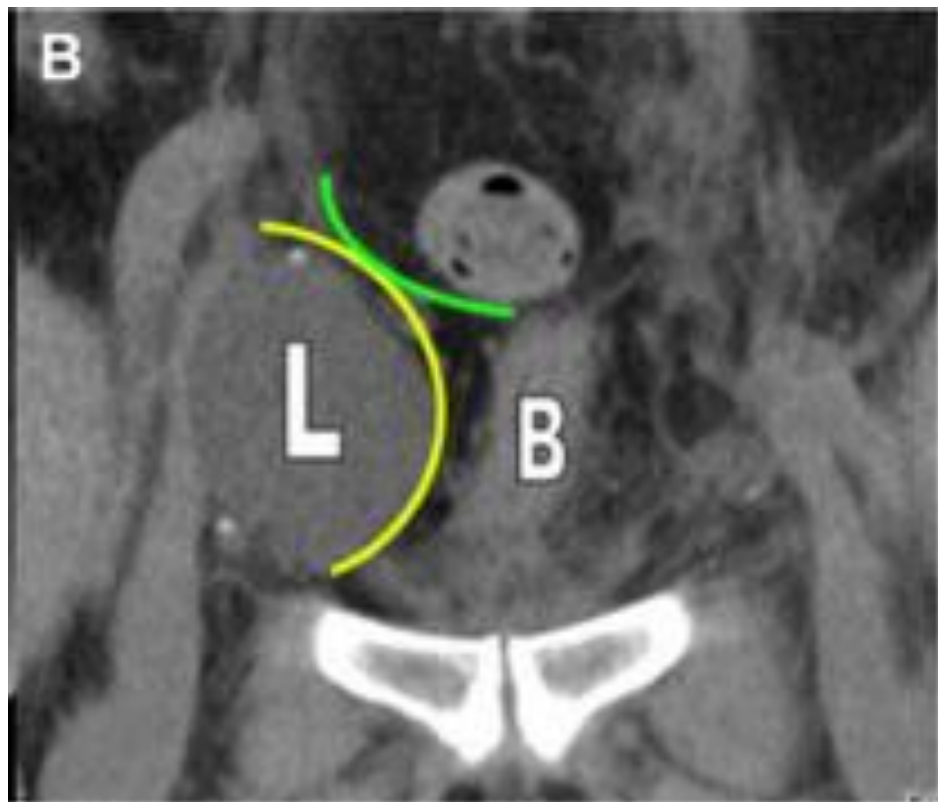


FIG. 1. Laparoscopic view of operative field. A. Lymphocele (L) lateral to Foley catheter balloon in bladder (FB) and medial umbilical ligament (M). B. Lymphocele cavity (L). Edges of peritoneal window have been cauterized. Bladder (B) is seen medial to cavity.

Complicações da Anastomose

Fístula urinária

- Relatos inadequados e imprecisos
 - Uso prolongado de dreno
 - Creatinina elevada no dreno
 - Extravazamento de urina em cistografia
- Incidência: 0,67% – 10%
- Acesso
 - Extra-Perit: Assintomático
 - Trans-Perit: Peritonite?

- 43 LRP
 - 10 pontos separados → 3 fístulas
 - 33 suturas contínuas → 1 fístula



TABLE 4. Perioperative and postoperative complications

	No. TURP	No. No TURP	p Value
Minor:			
Retention	5	3	0.23
Anastomotic leakage	18	7	0.01
Simple urinary tract infection	15	8	0.08
Lymphocele	0	1	0.16
Phlebitis	1	0	0.16
Ileus	3	0	0.04
Superficial abscess	1	0	0.16
Major:			
Infected hematoma	0	1	0.16
Bowel injury	2	1	0.28
Urosepsis	3	1	0.16
Hemorrhage	6	12	0.07
Cardiac	1	0	0.16
Uroperitoneum	1	0	0.16
Acute renal failure	5	0	0.01
Pulmonary embolism	1	0	0.16
Bladder injury	1	0	0.16
Peritonitis	1	0	0.16
Totals	64	34	<0.01

- 74 pacientes
 - Grupo A: Cisto após 48h → s/ extravazamento → retirada de SVD
 - Grupo B: Cisto após 6d → s/ extravazamento → retirada de SVD

Table 2 – Perioperative outcomes

Variable	Postoperative catheter removal		p value
	Day 2 (n = 37)	Day 6 (n = 37)	
Median operative time, min (IQR)	150 (130–190)	155 (136–217)	0.321
Lymph node dissection, n (%)	10 (27)	9 (25)	0.119
Bilateral nerve-sparing procedure, n (%)	34 (97)	23 (70)	0.008
Median blood loss, ml (IQR)	200 (150–325)	300 (190–400)	0.072
Postoperative complications, n (%)			0.368
Clavien-Dindo grade 0	29 (81)	30 (83)	
Clavien-Dindo grade 1	4 (11)	3 (8)	
Clavien-Dindo grade 2	3 (8)	1 (3)	
Clavien-Dindo grade 3	0	2 (7)	
Median catheterization time, d (IQR)	2 (2–2)	6 (6–6)	<0.001
Median in-hospital stay, d (IQR)	3 (3–4)	6 (6–6)	<0.001

Table 4 – Retention rates, urodynamic parameters, ICIQ and VAS scores

Variable	Postoperative catheter removal		p value
	Day 2 (n = 37)	Day 6 (n = 37)	
Urinary retention at catheter removal, n (%)	4 (11)	3 (8)	0.691
Uroflowmetry at catheter removal			
Median postoperative Q_{max} , ml/s (IQR)	10 (6–14)	21 (18–28)	<0.001
Median voided volume, ml (IQR)	202 (146–315)	174 (131–307)	<0.001



PERIOPERATIVE COMPLICATIONS OF LAPAROSCOPIC RADICAL PROSTATECTOMY: THE MONTSOURIS 3-YEAR EXPERIENCE

BERTRAND GUILLONNEAU,* FRANÇOIS ROZET, XAVIER CATHELINÉAU, FRANK LAY, ERIC BARRET, JEAN-DOMINIQUE DOUBLET, HERVÉ BAUMERT AND GUY VALLANCIEN

From the Department of Urology, Institut Mutualiste Montsouris, Université Pierre et Marie Curie, Paris, France

- 567 pacientes → 10% de fístula
 - 46 na vigência de SVD
 - 43 resolveram com sondagem prolongada (12 dias) + dreno
 - 2 drenagens percutâneas
 - 1 re-anastomose
 - 11 após retirada da SVD
 - Todos resolveram com re-SVD

Minimally invasive treatment of vesicourethral leak after laparoscopic radical prostatectomy

Tratamento minimamente invasivo para fistula vesicouretral após prostatectomia radical videolaparoscópica

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TIAGO RIVELLO ELMOR¹; MAURICIO RUBINSTEIN²; GUILHERME LIMA³; ANTONIO CESAR CRUZ³; CLOVIS FRAGA TENÓRIO PEREIRA³; IRINEU RUBINSTEIN².

- 620 tLRP → 10 fístulas prolongadas (> 400ml no 2o PO)
- Cateter ureteral 6Fr exteriorizado pela SVD

Patient	Interval between procedures (with PVAL)	Fistula output (mean 24h)	Resolution after rapprochement (output <50ml)
1	9 days	400ml	24 hours
2	6 days	720ml	24 hours
3	3 days	950ml	48 hours
4	5 days	650ml	48 hours
5	6 days	450ml	48 hours
6	4 days	800 ml	72 hours
7	4 days	850ml	72 hours
8	7 days	560ml	24 hours
9	3 days	1100ml	72 hours
10	6 days	480ml	48 hours

Original Article: Clinical Investigation

Cystoscopic injection of N-butyl-2-cyanoacrylate followed by fibrin glue for the treatment of persistent or massive vesicourethral anastomotic urine leak after radical prostatectomy

Ju Hyun Lim, Dalsan You, In Gab Jeong, Hyung Keun Park, Hanjong Ahn, Choung-Soo Kim ✉



View issue TOC
Volume 20, Issue 10
October 2013
Pages 980-985

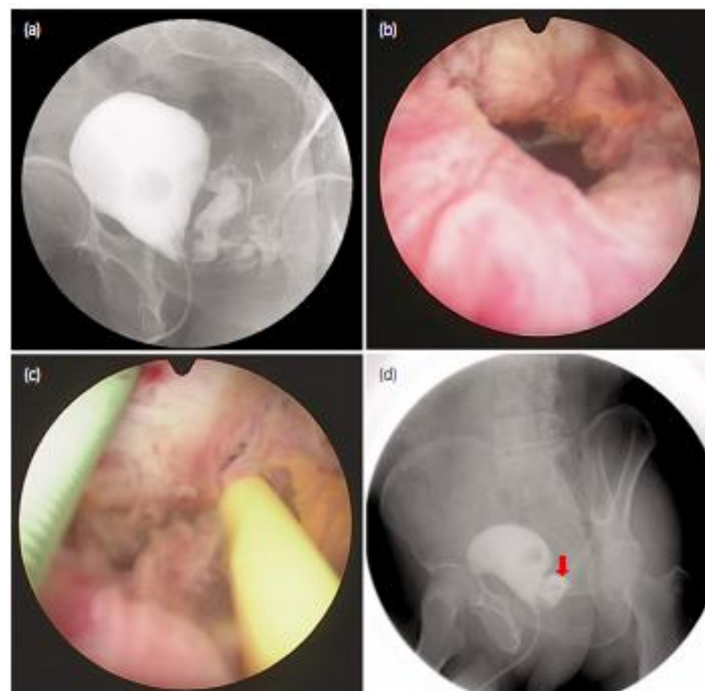
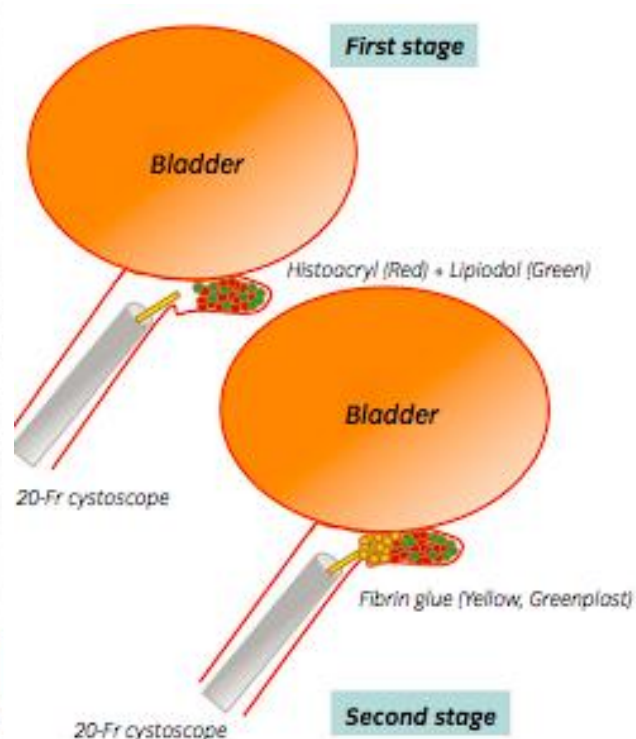


Table 1 Clinical outcome of 10 patients

Variables

Mean time \pm SD (median, range)

Days from RP to glue injection	16.0 \pm 10.1 (14, 12-27)
Days from glue injection to urethral catheter removal	7.7 \pm 4.9 (8, 3-13)
Total urethral catheterization time in days	24.0 \pm 12.3 (21, 15-37)
Weeks to complete urinary continence	20.4 \pm 4.3 (16.0, 3.9-60.0)

- 391 pacientes → 4 fístulas prolongadas (> 1,5L após 6 dias)
 - Descontinuidade > 2/3 da anastomose → re-anastomose (2 casos)
 - Descontinuidade < 2/3 da anastomose → sutura do defeito (2 casos)

- Dosar creat antes de tirar o dreno?
- Cistografia antes de tirar a SVD?

Estenose de anastomose/ colo vesical

- Década de 90 → 12%
- Atualmente → 0,5 – 3,0%

- Anastomose
 - hermeticamente fechada
 - Sem tensão
 - Boa vascularização
 - Aposição das mucosas
 - Uretra alinhada

- 467 PR → 52 estenoses (11,1%)

TABLE II. Operative time and estimated blood loss between patients who did and did not develop bladder neck contracture following radical prostatectomy, compared by the rank-sum test

	Bladder Neck Contracture		P
	Yes	No	
Operative time (min)	271 (± 38)	249 (± 60)	0.025
Estimated blood loss (mL)	1639 (± 740)	1092 (± 755)	<0.001

Values presented as mean (±SD).

- Sem relação
 - Tipo de anastomose
 - Número de pontos
 - Calibre da SVD

TABLE I. Percentage and chi-square contingency tests of patients undergoing radical prostatectomy who developed bladder neck contracture according to various preoperatively determined comorbidities

Comorbidity	No. Patients	BNC (%)	P
Smoking history			
Current smoker	62	16 (26)	<0.001*
Past smoker	207	18 (9)	
Never smoked	168	15 (9)	
Coronary artery disease			
Yes	70	18 (26)	<0.001
No	369	33 (9)	
Hypertension			
Yes	198	31 (16)	0.015
No	244	19 (8)	
Diabetes mellitus			
Yes	48	10 (21)	0.030
No	390	39 (10)	

Incidence of bladder neck contracture after robot-assisted laparoscopic and open radical prostatectomy

Benjamin N. Breyer^{*}, Cole B. Davis^{*,†}, Janet E. Cowan^{*}, Christopher J. Kane[‡], and Peter R. Carroll^{*,†}

- 695 ORP vs 293 LARP
 - Estenose de colo ORP: 2,6% (18 casos)
 - Estenose de colo LARP: 1,4% (4 casos)
- Sintomas após 4,7 meses
 - Diminuição do fluxo
 - Retenção urinária

Clinical characteristics of the patients with BNC in the ORP and RALP groups

Variable	ORP	RALP
<i>N</i>	18	4
Mean (SD) age, years	62.2 (6.3)	63.8 (6.8)
<i>N</i> (%) or <i>n</i> / <i>N</i> :		
Presenting complaint:		
Slow stream	11 (61)	3/4
Urinary retention	3 (16)	0
Frequency	2 (11)	1/4
Incontinence	1 (6)	0
Staining	1 (6)	0
Median (range) time to BNC from surgery, months	2.5 (1–13.5)	6 (3–24)
<i>N</i> (%) or <i>n</i> / <i>N</i> :		
Fascial sling during RP	8 (44)	0
Number of interventions required:		
1	10 (56)	2/4
2	5 (28)	2/4
≥3	3 (16)	0

- 467 PR → 52 estenoses (11,1%)
 - 38 tratados com dilatação → 57% de sucesso
 - 14 tratados com UI → 58% de sucesso
- Sem interferência em incontinência urinária

Estenose de anastomose/ colo vesical

- Casos refratários
 - SVD/ cistostomia
 - Auto-dilatação
 - Nova Incisão
 - Ressecção do colo
 - Stent uretral
 - Reconstrução do colo

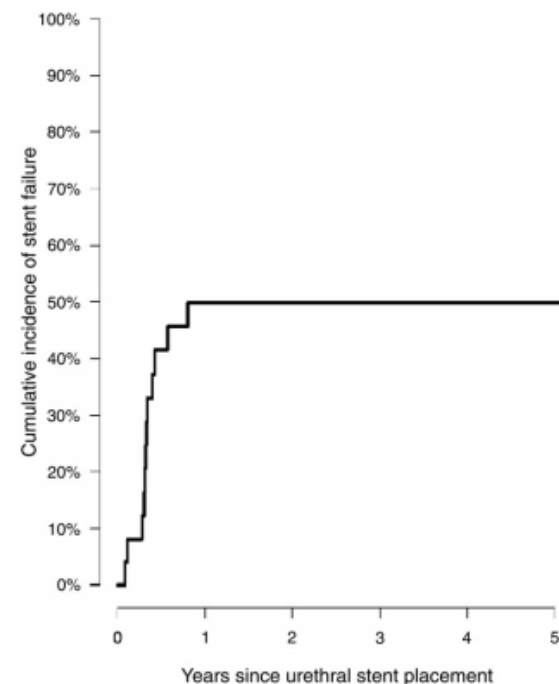


March 2009 Volume 181, Issue 3, Pages 1236–1241

[James S. Magera Jr.](#), [Brant A. Inman](#), [Daniel S. Elliott](#) 

Department of Urology, Mayo Clinic, Rochester, Minnesota

- 25 pacientes com estenose de colo pós-resssecção da anastomose
 - 92% com incontinência severa
 - Média de 3 procedimentos prévios
- 24% falha completa
- 48% necessita de novo tratamento



- Mitomicina → ação anti-proliferativa e anti-mitótica



Figure 1. Preoperative bladder neck contracture

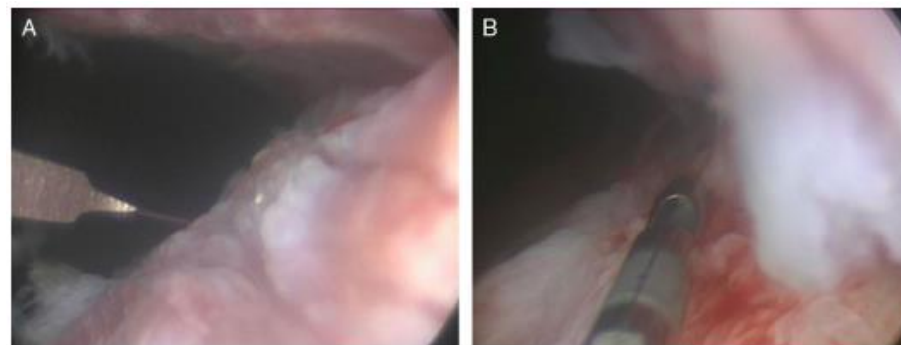


Figure 2. A, cold knife urethrotomy. B, MMC injection.

- 18 pacientes
- Seguimento de 12 meses
 - 72% de sucesso

Complicações Intestinais


Christian Thomas,* Jon Jones,* Wolfgang Jäger,* Christian Hampel,*
Joachim W. Thüroff† and Rolf Gillitzer*,‡

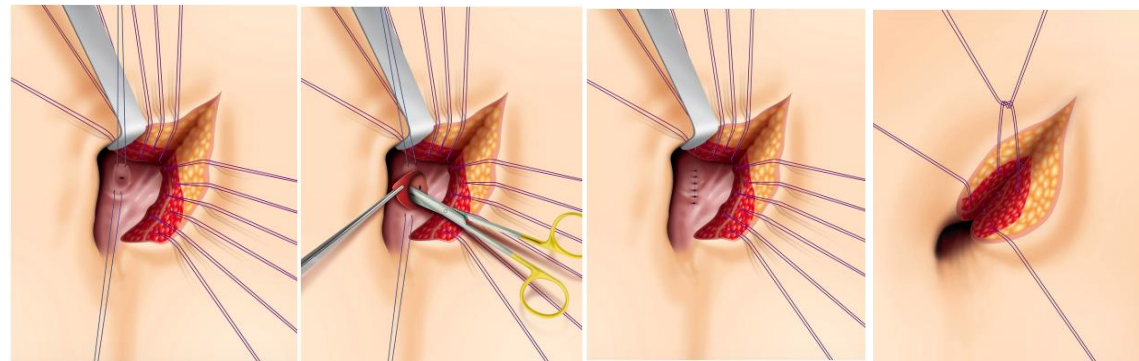
Fístula reto-vesical ou reto-uretral

- Incidência
 - 13/2447 (0,53%)
 - 7/13 → sutura intra-op do reto
- Sintomas (2 semanas após cirurgia)
 - Fecalúria
 - Pneumatúria
 - Perda urinária pelo ânus
- SVD por 7 dias, com cistografia normal em 54%

Modified York Mason technique for repair of iatrogenic recto-urinary fistula: 20 years of the Montsouris experience

Authors [Authors and affiliations](#)

Sébastien Bergerat, François Rozet , Eric Barret, José Batista da Costa, Adalberto Castro, Paolo Dell'oglio, Marc Galiano, Alexandre Ingels, Rafael Sanchez Salas, Xavier Cathelineau



- 30 pacientes
 - Sucesso após 1 procedimento: 80%
 - Sucesso após 2 procedimentos: 97%
 - Sucesso após 3 procedimentos: 100%

- Sem incontinência fecal ou urinária

- Paciente em posição de canivete

- Acesso trans-anal trans-esfincteriano posterior, com incisão às 2h

- Não sutura urotélio
- Parede anterior do reto fechada em 2 planos
- Parede posterior do reto fechada em 1 plano

Table 2 Major contemporary reports of RUF repair using the York Mason procedure

References	Pts no	PFRA	Antcdts EBRT/BT	Bladder suture	AUI	AUS	AFI	Healing with YM (%)			
								1st proc.	Final with YM		
Al-Ali [23]	11	0	0	No	0	3	0	100	–		
Hanna [21]	10	NA	2	Yes	NA	NA	NA	100	–		
Dal Moro [14]	14	0	0	Yes	0	0	0	100	–		
Rouanne [26]	10	6	0	Yes	0	2	0+	100	–		
Forest [27]	17	NA	7	Yes	1*	0	0	76	82		
Hadley [22]	51	0	7	Yes	0	0	0	90	92		
Falavolti [28]	39	39	NA	Yes	NA	NA	0	54	NA		
Present series	30	13	1	No	0	0	0++	80	100		
Total	182	≥ 58	≥ 17					1 (0.8%)	5 (3.8%)	0	81%

Minimally Invasive Transanal Repair of Rectourethral Fistulas

Giulio Nicita  , Donata Villari, Simone Caroassai Grisanti, Michele Marzocco, Vincenzo Li Marzi, Alberto Martini

January 2017 Volume 71, Issue 1, Pages 133–138

Department of Urology, University of Florence, Careggi Hospital, Florence, Italy

- 12 pacientes
 - Fístula < 1,5cm, sem sepse ou fecalúria

- Paciente em posição de canivete (prona), com retrator anal de Park

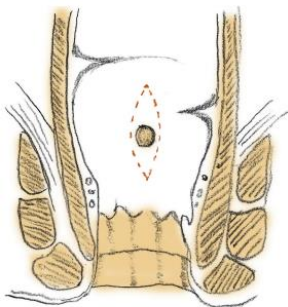
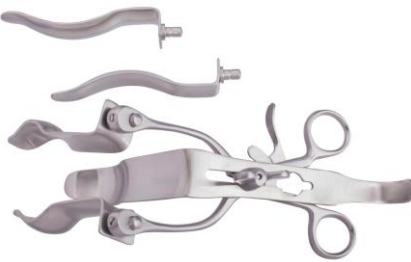


Fig. 1 - Lozenge incision of the rectal wall.

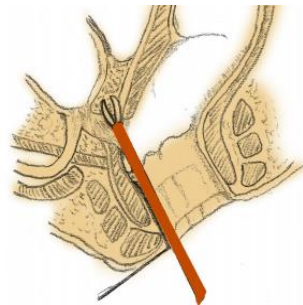


Fig. 2 - Carving the rectal wall's edges in order to reach healthy tissue.

Table 2 - Postoperative results

Case no.	Operative time (min)	VAS on Day 1	Hospital stay (d)	Follow-up (mo)	Time between prostatectomy and MITAR (d)
1	60	3	1	74	60
2	55	3	1	61	69
3	50	2	2	43	72
4	60	2	1	31	71
5	50	3	1	25	76
6	60	2	4	22	58
7	70	4	2	20	60
8	50	3	1	18	78
9	50	2	2	15	61
10	60	3	3	13	57
11	60	3	1	13	73
12	50	2	2	12	62

MITAR = minimally invasive transanal repair; VAS = Visual Analogue Scale.

Management of Surgical and Radiation Induced Rectourethral Fistulas With an Interposition Muscle Flap and Selective Buccal Mucosal Onlay Graft

Alex J. Vanni, Jill C. Buckley, Leonard N. Zinman

Institute of Urology, Lahey Clinic Medical Center, Burlington, Massachusetts

- 74 casos
- Acesso perineal
 - Interposição de músculo (grácil em 68/74 casos)
 - 100% de sucesso em casos sem RTx
 - 85% de sucesso pós RTx
 - Enxerto de mucosa oral se defeito uretral > 2cm

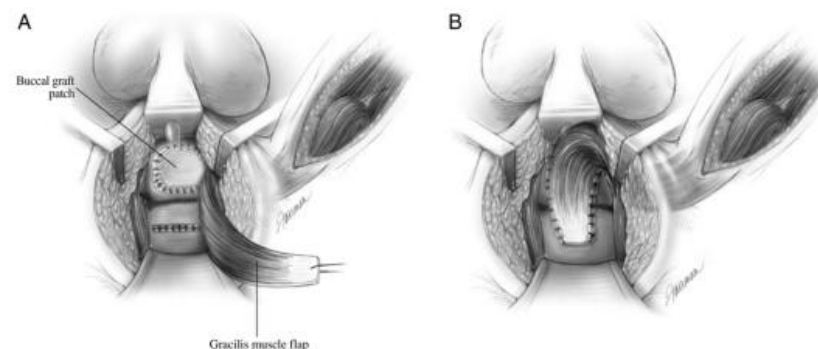
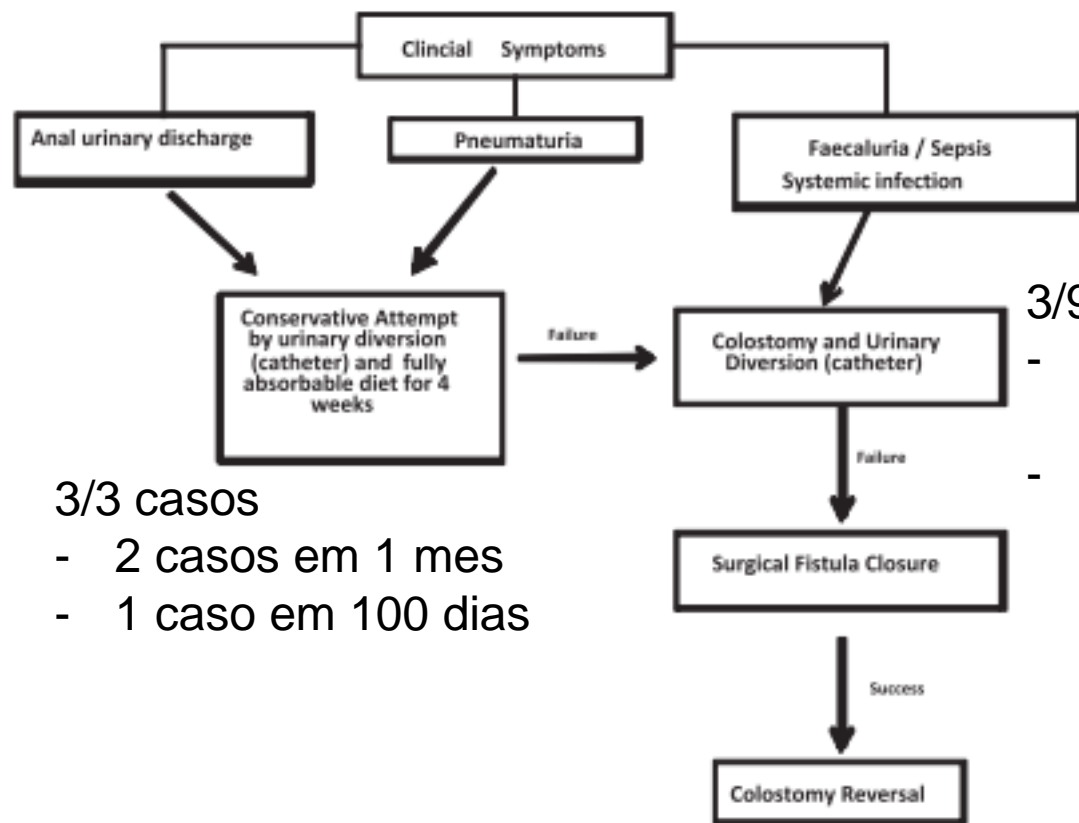


Figure 1. Gracilis muscle interposition flap with BMG closure of urethra (A), and with flap placed over BMG and anchored to periurethral tissue (B).

Incidence, Clinical Symptoms and Management of Rectourethral Fistulas After Radical Prostatectomy

Christian Thomas,* Jon Jones,* Wolfgang Jäger,* Christian Hampel,*
Joachim W. Thürofft and Rolf Gillitzer*,‡



3/3 casos
- 2 casos em 1 mes
- 1 caso em 100 dias

3/9 casos
- 2 casos em < 1 mes
- 1 caso em 100 dias

- Quando fazer colostomia?
 - Pós-RTx
 - Re-op
 - Lesões > 2cm³

Algorithm for management of RUF after RP

OBRIGADO

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