ΑΝΤΙΜΕΤΩΠΙΣΗ ΜΙΚΡΗΣ ΝΕΦΡΙΚΗΣ ΜΑΖΑΣ: Η ΜΕΡΙΚΗ ΝΕΦΡΕΚΤΟΜΗ ΕΙΝΑΙ ΚΑΛΥΤΕΡΗ

ΙΩΑΝΝΗΣ ΒΑΡΚΑΡΑΚΗΣ
ΕΠΙΚΟΥΡΟΣ ΚΑΘΗΓΗΤΗΣ ΟΥΡΟΛΟΓΙΑΣ

ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
ΣΙΣΜΑΝΟΓΛΕΙΟ ΝΟΣΟΚΟΜΕΙΟ

Β' ΟΥΡΟΛΟΓΙΚΗ ΚΛΙΝΙΚΗ ΠΑΝΕΠΙΣΤΗΜΙΟΥ ΑΘΗΝΩΝ

UROSchool 2013

ΔΕΝ ΕΧΩ ΚΑΜΜΙΑ ΣΥΓΚΡΟΥΣΗ ΣΥΜΦΕΡΟΝΤΩΝ

ΕΡΩΤΗΣΗ 1η

ΕΠΙΠΛΟΚΕΣ ΚΑΙ ΝΕΦΡΙΚΗ ΛΕΙΤΟΥΡΓΙΑ:

ΕΞΑΧΝΩΣΗ ή ΜΕΡΙΚΗ ΝΕΦΡΕΚΤΟΜΗ

Review – Kidney Cancer

Laparoscopic versus Open Partial Nephrectomy: Analysis of the Current Literature

Francesco Porpiglia *, *Alessandro Volpe*, *Michele Billia*, *Roberto Mario Scarpa*

Department of Urology, San Luigi Hospital, Orbassano, University of Turin, Turin, Italy

Results: OPN is an established curative approach for the treatment of small renal tumours. LPN is challenging and the technique is still under development. The intermediate-term oncologic and functional outcomes of LPN are similar to those of OPN in experienced centres. However, the ischaemia time is longer in laparoscopy and a long learning curve is needed to decrease the risk of complications. In the first phase of a surgeon's experience with LPN, a careful case selection based on the tumour growth pattern is required.

ΑΠΑΙΤΗΤΙΚΗ ΕΠΕΜΒΑΣΗ

SCIENTIFIC PAPER JSLS

A Comparison of Robotic, Laparoscopic and Open Partial Nephrectomy

Steven M. Lucas, MD, Matthew J. Mellon, MD, Luke Erntsberger, MD, Chandru P. Sundaram, MD

Conclusion: Renal function preservation and complications are similar for each treatment modality. OPN offers faster operative and ischemia times at the expense of greater blood loss and hospital stay.

ΑΝΕΞΑΡΤΗΤΩΣ ΠΡΟΣΠΕΛΑΣΕΩΣ

Surgical and Oncologic Outcomes of Laparoscopic Partial Nephrectomy: A Japanese Multi-Institutional Study of 1375 Patients

Hideo Saito, M.D.,[1] Tadashi Matsuda, M.D.,[2] Kazunari Tanabe, M.D.,[3] Akihiro Kawauchi, M.D.,[4] Toshiro Terachi, M.D.,[5] Ken Nakagawa, M.D.,[6] Masatsugu Iwamura, M.D.,[7] Masanobu Shigeta, M.D.,[8] Katsunori Tatsugami, M.D.,[9] Akihiro Ito, M.D.,[1] Jiro Machida, M.D.,[10] Mutsushi Kawakita, M.D.,[11] Hidefumi Kinoshita, M.D.,[2] Nobuo Shinohara, M.D.,[12] Naomasa Ioritani, M.D.,[13] Toshimori Seki, M.D.,[14] and Yoichi Arai, M.D.[1]
on behalf of the Japanese Society of Endourology Laparoscopic Partial Nephrectomy Study Group

ΕΠΙΠΛΟΚΕΣ 0-22%
Ανεξάρτητως εμπειρίας

Table 3. Urological Complications

	All patients		era1		era2		era3		
	No. Pts.	Data	No. Pts.	Data	No. Pts.	Data	No. Pts.	Data	p Value
Renal insufficiency (%)	1322		147		588		587		
All Grade		5 (0.4)		0 (0.0)		5 (0.9)		0 (0.0)	0.04
G3. 4		2 (0.2)		0 (0.0)		2 (0.3)		0 (0.0)	0.29
Urine leak (%)	1373		147		622		604		
All Grade		34 (2.5)		7 (4.8)		18 (2.9)		9 (1.5)	0.22
G3. 4		24 (1.7)		5 (3.4)		12 (1.9)		7 (1.2)	0.16
Hematuria (%)	1324		147		590		587		
All Grade		184 (13.9)		27 (18.4)		55 (9.3)		102 (17.4)	<0.0001
G3. 4		17 (1.3)		1 (0.7)		10 (1.7)		6 (1.0)	0.46
Intraop Hemorrhage (%)	1322		147		588		587		
All Grade		115 (8.7)		24 (16.3)		36 (6.0)		55 (9.4)	0.00
G3. 4		31 (2.3)		5 (3.4)		11 (1.9)		15 (2.6)	0.50
Postop Hemorrhage (%)	1369		147		619		603		
All Grade		40 (2.9)		2 (1.4)		21 (3.4)		17 (2.8)	0.41
G3. 4		22 (1.6)		1 (0.7)		10 (1.6)		11 (1.8)	0.61

All complications were classified based on the NCI-CTC version 2.0.

dently associated with high grade (grade 3–5) urologic and nonurologic complications. Despite increases in central tumor, a trend was seen toward shorter warm/cold ischemic time in recent cases, and the overall complication rate did not change throughout the study period. With a median follow-up of 26 months for 1193 malignancies, recurrence occurred in 22 (1.7%) patients, including local recurrence in 7 (0.5%), lung in 8 (0.7%), lymph nodes in 2 (0.1%),

ΕΠΙΠΛΟΚΕΣ: RFA & CRYO

2004

DEFINING THE COMPLICATIONS OF CRYOABLATION AND RADIO FREQUENCY ABLATION OF SMALL RENAL TUMORS: A MULTI-INSTITUTIONAL REVIEW

D. BROOKE JOHNSON, STEPHEN B. SOLOMON, LI-MING SU, EDWARD D. MATSUMOTO, LOUIS R. KAVOUSSI, STEPHEN Y. NAKADA, TIMOTHY D. MOON, W. BRUCE SHINGLETON AND JEFFREY A. CADEDDU*

From the Division of Urology, University of Utah Health Sciences Center (DBJ), Salt Lake City, Utah, Brady Urological Institute, Johns Hopkins School of Medicine (SBS, L-MS, LRK), Baltimore, Maryland, University of Wisconsin Hospitals and Clinics (SYN) and University of Wisconsin and Veterans Administration Medical Center (TDM), Madison, Wisconsin, University of Mississippi Medical Center (EDM, WBS), Jackson, Mississippi, and Department of Urology, University of Texas Southwestern Medical Center (JAC), Dallas, Texas

- 139 CRYO, 133 RFA
- 181 PCN, 90 LAP
- **ΕΠΙΠΛΟΚΕΣ 11.1%** (30/271)
  - ✓**Μείζονες 1.8%**
  - ✓**Ελάσσονες 9.2%**
  - ✓86% οφείλονται άμεσα στην επέμβαση
- ΘΝΗΤΟΤΗΤΑ 0.4% (1/271)

Κακό «παράθυρο» = Λαπαροσκοπική Προσπέλαση = Γενική Αναισθησία

- Όγκοι στην πρόσθια επιφάνεια του νεφρού κοντά σε όργανα που πρέπει να απωθηθούν

Chronic Kidney Disease Before and After Partial Nephrectomy

Melanie A. Clark,* Sergey Shikanov,* Jay D. Raman,* Benjamin Smith,* Matthew Kaag,* Paul Russo,† Jeffrey C. Wheat,‡ J. Stuart Wolf, Jr.,§ Surena F. Matin,‖ William C. Huang,* Arieh L. Shalhav* and Scott E. Eggener¶,**

From the Section of Urology, University of Chicago, Chicago, Illinois (MAC, SS, ALS, SEE), Division of Urology, Penn State Milton S. Hershey Medical Center, Hershey, Pennsylvania (JDR, BSJ), Department of Surgery, Memorial Sloan-Kettering Cancer Center (MK, PR) and Department of Urology, New York University (WCH), New York, New York, Department of Urology, University of Michigan, Ann Arbor, Michigan (JCW, JSW), and Department of Urology, The University of Texas M. D. Anderson Cancer Center, Houston, Texas (SFM)

Conclusions: Chronic kidney disease stage III or greater will develop postoperatively in approximately a third of patients with an estimated glomerular filtration rate greater than 60 ml/minute/1.73 m^2, and this progression is associated with definable demographic, tumor and surgical factors.

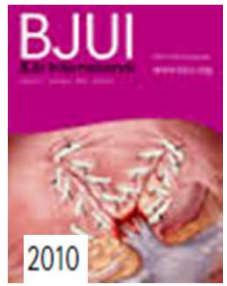
Table 2. *Univariate and multivariate logistic of progression to CKD stage III or greater*

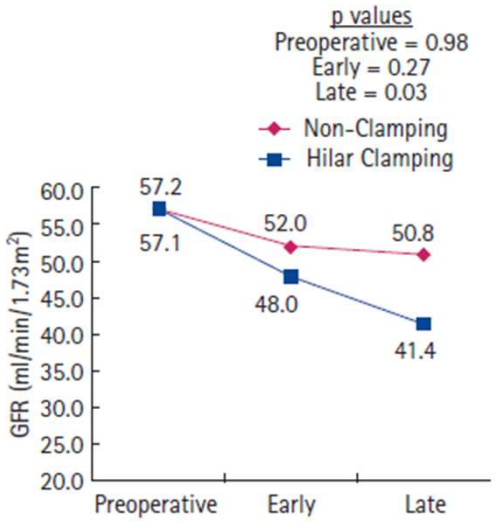
	Univariate		Multivariate	
	OR (95% CI)	p Value	OR (95% CI)	p Value
Age (per yr)	1.05 (1.03–1.06)	<0.001	1.05 (1.03–1.07)	<0.001
Gender (male-reference)	1.37 (1.03–1.82)	0.031	1.79 (1.25–2.56)	0.002
Race (African-American-reference)	1.27 (0.72–2.24)	0.4	0.85 (0.41–1.78)	0.7
Body mass index (per unit)	0.98 (0.96–1.01)	0.2	0.99 (0.97–1.02)	0.6
OPN vs LPN (LPN-reference)	2.47 (1.75–3.49)	<0.001	2.10 (0.84–5.24)	0.114
HTN	1.40 (1.06–1.86)	0.017	0.82 (0.56–1.22)	0.3
DM	1.10 (0.76–1.60)	0.6	0.95 (0.58–1.56)	0.9
CAD	1.21 (0.84–1.76)	0.3	0.89 (0.55–1.42)	0.6
Tumor size (per cm)	1.13 (1.04–1.23)	0.004	1.20 (1.06–1.35)	0.003
Margins (neg-reference)	0.51 (0.21–1.25)	0.141	0.37 (0.12–1.16)	0.087
Clamping (artery alone-reference)	0.56 (0.40–0.78)	0.001	2.16 (1.06–4.41)	0.035
Ischemia time (per min)	1.02 (1.01–1.03)	0.005	1.00 (0.99–1.01)	0.9
Renal hypothermia (none-reference)	2.42 (1.75–3.33)	<0.001	2.28 (0.99–5.25)	0.054
Estimated blood loss (per 100 cc)	1.04 (1.00–1.09)	0.056	0.99 (0.93–1.05)	0.7
Preop GFR (per ml/min/1.73 m^2)	0.94 (0.93–0.95)	<0.001	0.95 (0.94–0.97)	<0.001

Comparison of hilar clamping and non-hilar clamping partial nephrectomy for tumours involving a solitary kidney

BJUI
BJU INTERNATIONAL

Matthew F. Wszolek, Patrick A. Kenney, Yoojin Lee* and John A. Libertino





PNx χωρίς ισχαιμία

Variable	Non-clamping	Hilar clamping	*P*
Tumour size (cm), mean ± SD (range)	3.6 ± 2.1 (0.9–13)	4.1 ± 2.6 (1.5–15)	0.15
Number of tumours resected, median (range)	1 (1–13)	1 (1–8)	0.87
Tumour locations, *n* (%)			0.07
Hilar/central	25 (33)	14 (48)	
Peripheral	42 (56)	9 (31)	
Hilar/central and peripheral	8 (11)	6 (21)	
Estimated blood loss, median (range)	900 (100–15000)	1000 (100–12000)	0.86
Surgical time (min), median (range)	245 (95–655)	270 (149–682)	0.02
Ischaemic time (min), mean ± SD (range)		25 ± 14 (8–60)	

Open Partial Nephrectomy for Tumor in a Solitary Kidney: Experience With 400 Cases

Amr F. Fergany,* Ismail R. Saad, Lynn Woo and Andrew C. Novick
From the Glickman Urological Institute, Cleveland Clinic Foundation, Cleveland, Ohio

Results: In the overall series 5 and 10-year cancer specific survival was 89% and 82%, respectively. Surgical complications occurred in 52 patients (13%), most commonly urinary leakage. Early postoperative renal function was achieved in 398 patients (99.5%). Only 2 patients required permanent dialysis postoperatively. Satisfactory long-term renal function was achieved in 382 patients (95.5%). A total of 18 patients had progressed to renal failure a mean of 3.6 years after surgery. Patient age, the amount of renal parenchyma resected, a congenitally absent or atrophic contralateral kidney and the time of contralateral nephrectomy were noted to be significantly associated with postoperative renal function.
Conclusions: Open surgical partial nephrectomy can be safely performed in patients with tumor in a solitary kidney. Long-term cancer-free survival with the preservation of renal function can be reliably expected in most of these cases.

Cryoablation Versus Minimally Invasive Partial Nephrectomy for Small Renal Masses in the Solitary Kidney: Impact of Approach on Functional Outcomes

Kamol Panumatrassamee,* Jihad H. Kaouk,† Riccardo Autorino,* Andrew T. Lenis,* Humberto Laydner,* Wahib Isac,* Jean-Alexandre Long,* Remi Eyraud,* Ahmad Kassab,* Ali Khalifeh,* Shahab Hillyer,* Emad Rizkala,* Georges-Pascal Haber‡ and Robert J. Stein*,§

2012

Conclusions: In patients with solitary kidneys, renal cryoablation is associated with superior perioperative outcomes compared to partial nephrectomy. Specifically, partial nephrectomy is not associated with greater loss of renal function than renal cryoablation regardless of the extent of tumor complexity.

ΕΡΩΤΗΣΗ 2η

ΤΟΠΙΚΗ ΥΠΟΤΡΟΠΗ ΚΑΙ ΑΝΤΙΜΕΤΩΠΙΣΗ ΤΗΣ:

ΕΞΑΧΝΩΣΗ ή ΜΕΡΙΚΗ ΝΕΦΡΕΚΤΟΜΗ

6ο Ελληνικό Διαδραστικό Σχολείο Ουρολογίας
18-21/4/2013
Πορταριά Πήλιο

Positive Surgical Margins After Nephron-Sparing Surgery

2012

Martin Marszalek[a,b,*], *Marco Carini*[c], *Piotr Chlosta*[d], *Klaus Jeschke*[e], *Ziya Kirkali*[f], *Ruth Knüchel*[g], *Stephan Madersbacher*[a], *Jean-Jacques Patard*[h], *Hendrik Van Poppel*[i]

[a] Department of Urology and Andrology, Donauspital, Vienna, Austria; [b] Department of Urology, Graz Medical University, Graz, Austria; [c] Department of Urology, University of Florence, Careggi Hospital, Florence, Italy; [d] Department of Urology, Institute of Oncology, Kielce, Poland; [e] Department of Urology, Klagenfurt General Hospital, Klagenfurt, Austria; [f] Department of Urology, Dokuz Eylul University School of Medicine, Izmir, Turkey; [g] Institute of Pathology, Aachen University, Aachen, Germany; [h] Department of Urology, Bicêtre Hospital, Paris XI University, Kremlin Bicêtre, France; [i] Department of Urology, University Hospital Leuven, Leuven, Belgium

- **+XO 0-7%**
  - Πιο συχνά σε ενδοφυτικούς και μικρούς σε μέγεθος όγκους
- Ενδιάμεσο FU χωρίς υποτροπή
  - Παρακολούθηση αρκετή
  - Κίνδυνος υποτροπής σε όγκους μεγάλου κακοήθους δυναμικού

Study	Follow-up, mo	Patients with PSM, no.	Patients with local recurrence, no.	Patients with distant metastasis, no.	Patients with NED, no.	Comment
Yossepowitch et al. [4]	39.6	77	NA	NA	NA	PSM not associated with increased risk of local recurrence or metastatic disease
Kwon et al. [7]	22	57	2	2	53	Higher local recurrence rate in highly malignant tumours with PSM
Lifshitz et al. [9]	18	6	0	0	6	PSM rate in initial and advanced experience
Zigeuner et al. [12]	76/85	6	2	3	3	PSM are frequently caused artificially
Scoll et al. [13]	12.7	5	0	0	5	Patients after RAPN
Gill et al. [15]	22.8	21	1	1	20	Results of 1800 patients undergoing LPN/OPN
Permpongkosol et al. [19]	32	7	0	1	6	PSM do not necessarily indicate residual disease
Benway et al. [21]	26	7	0	0	7	Patients after RAPN
Benway et al. [26]	48/12	1/5	0	0	6	LPN/RAPN
Piper et al. [32]	60	7	0	2	5	Questions the necessity of 1-cm margin width
Minervini et al. [41]	51	26	1	NA	NA	Patients after standard PN and simple enucleation
Raz et al. [45]	40	4	0	0	4	Avoid nephrectomy as response to PSM
Bensalah et al. [48]	37	111	7	4	NA	PSM occur more frequently in imperative cases. PSM associated with increased risk of recurrence, but do not affect CSS
Desai et at [52]	56.4	5	0	0	5	Surveillance in selected patients may be adequate without sacrificing oncologic control
Lopez-Costea et al. [53]	80.5	9	0	0	9	Manage microscopic PSM conservatively
Ray et al. [54]	24.0	8	0	0	8	OPN
Duvdevani et al. [64]	53.4	4	1	0	3	Accuracy of frozen sections in PN questionable

PSM = positive surgical margin; NED = no evidence of disease; NA = not applicable; RAPN = robot-assisted laparoscopic nephrectomy; LPN = laparoscopic partial nephrectomy; OPN = open partial nephrectomy; CSS = cancer-specific survival.
* Elective versus imperative indication group.

Positive Surgical Margin Appears to Have Negligible Impact on Survival of Renal Cell Carcinomas Treated by Nephron-Sparing Surgery

Karim Bensalah [a,], Allan J. Pantuck [b], Nathalie Rioux-Leclercq [a], Rodolphe Thuret [c], Francesco Montorsi [d], Pierre I. Karakiewicz [e], Nicolas Mottet [f], Laurent Zini [g], Roberto Bertini [d], Laurent Salomon [h], Arnaud Villers [g], Michel Soulie [i], Laurent Bellec [i], Pascal Rischmann [i], Alexandre De La Taille [h], Raffi Avakian [j], Maxime Crepel [a], Jean-Marie Ferriere [k], Jean-Christophe Bernhard [k], Thierry Dujardin [l], Frédéric Pouliot [l], Jérôme Rigaud [m], Christian Pfister [n], Baptiste Albouy [n], Laurent Guy [o], Steven Joniau [p], Hendrik van Poppel [p], Thierry Lebret [q], Thibault Culty [q], Fabien Saint [r], Amnon Zisman [s], Orit Raz [s], Hervé Lang [t], Romain Spie [t], Andreas Wille [u], Jan Roigas [u], Alfredo Aguilera [v], Bastien Rambeaud [f], Luis Martinez Piñeiro [v], Ofer Nativ [w], Roy Farfara [w], François Richard [x], Morgan Roupret [x], Christian Doehn [y], Patrick J. Bastian [z], Stefan C. Muller [z], Jacques Tostain [f], Arie S. Belldegrun [b], Jean-Jacques Patard [a]*

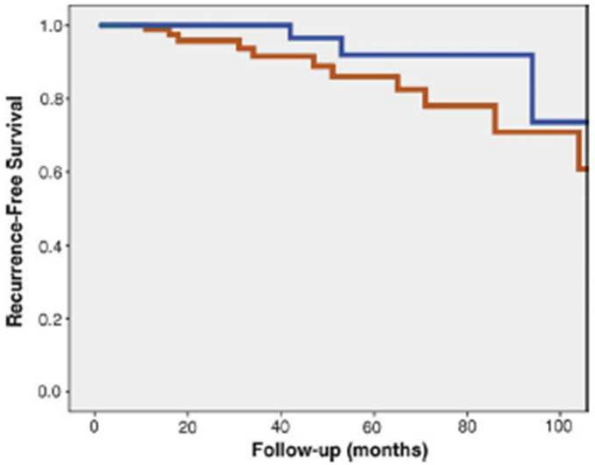


Fig. 1 – Recurrence-free survival according to margin status. There is no difference between negative (blue) and positive (orange) margin patients, which is significant (log-rank test, $p = 0.113$).

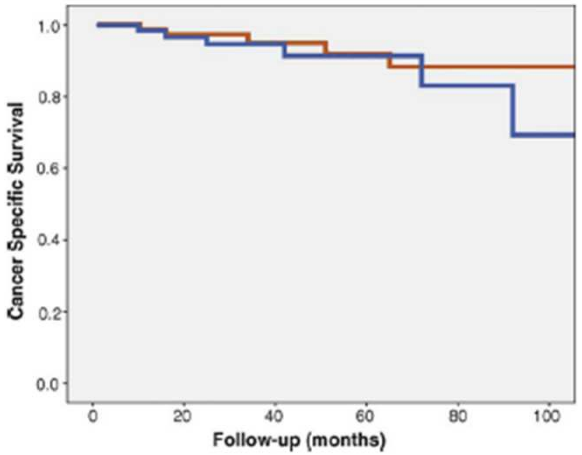


Fig. 2 – Cancer-specific survival curves according to margin status. Survival of negative (blue) and positive (orange) margin patients is similar (log-rank test, $p = 0.42$).

ΧΟ περιορισμένο ρόλο στην επιβίωση

A minimal tumour-free surgical margin following partial resection of RCC is sufficient to avoid local recurrence.		B

Robotic Partial Nephrectomy Versus Laparoscopic Cryoablation for the Small Renal Mass

EUROPEAN UROLOGY 61 (2012) 899–904

Julien Guillotreau[a], *Georges-Pascal Haber*[a,*], *Riccardo Autorino*[a], *Ranko Miocinovic*[a], *Shahab Hillyer*[a], *Adrian Hernandez*[b], *Humberto Laydner*[a], *Rachid Yakoubi*[a], *Wahib Isac*[a], *Jean-Alexandre Long*[a], *Robert J. Stein*[a], *Jihad H. Kaouk*[a]

Laparoscopic Cryoablation Versus Partial Nephrectomy for the Treatment of Small Renal Masses: Systematic Review and Cumulative Analysis of Observational Studies

EUROPEAN UROLOGY 60 (2011) 435–443

Tobias Klatte[a,*], *Bernhard Grubmüller*[a], *Matthias Waldert*[a], *Peter Weibl*[a], *Mesut Remzi*[b]

	Recurrence	Morbidity
Lap Cryo	8.5-11%	10-11%
PNx (rob & lap)	0-1.9%	19-20%

Επιπλοκές διπλασιάζονται

Αλλά καλύτερα ογκολογικά αποτελέσματα

Excise, Ablate or Observe: The Small Renal Mass Dilemma—A Meta-Analysis and Review

2008

David A. Kunkle, Brian L. Egleston and Robert G. Uzzo*

From the Departments of Urologic Oncology and Biostatistics (BLE), Fox Chase Cancer Center, Temple University School of Medicine, Philadelphia, Pennsylvania

	Lap PNx	CRYO	RF	Active Surveillance
Age	60	65	67	68.7
Tumor size	3.4	2.5	2.6	3
FU (mt)	54	18	16	33
Unknown pathology	0%	17.7%	42.8%	54%
Local recurrence	2.6%	4.6% RR 7.45	11.7% RR18.23	
Progress to metastasis	5.6%	1.2%	2.3%	0.9%

Μετανάλυση (99 μελέτες, 6471 όγκους)

ΕΛΕΓΧΟΣ ΥΠΟΤΡΟΠΗΣ ΣΕ ΕΞΑΧΝΩΣΗ

- **Πρόσληψη** σκιαγραφικού στη CT **χωρίς** υπολλειπόμενο **όγκο** στη Bx

Park S et al Urology 2006
Stein AJ et al J Endourol 2008

- **Χωρίς πρόσληψη** σκιαγραφικού στη CT υπολλειπόμενος **όγκος** στη Bx

Gill IS et al J Urol 2005
Weight CJ et al J Urol 2008

ΕΡΩΤΗΣΗ 3η

ΟΓΚΟΛΟΓΙΚΑ ΑΠΟΤΕΛΕΣΜΑΤΑ:

ΕΞΑΧΝΩΣΗ ή ΜΕΡΙΚΗ ΝΕΦΡΕΚΤΟΜΗ

Collaborative Review – Kidney Cancer

The Expanding Role of Partial Nephrectomy: A Critical Analysis of Indications, Results, and Complications

Karim Touijer[a,], Didier Jacqmin[b], Louis R. Kavoussi[c], Francesco Montorsi[d], Jean Jacques Patard[e], Craig G. Rogers[f], Paul Russo[a], Robert G. Uzzo[g], Hendrik Van Poppel[h]*

Authors	Study period	Single vs multi-institution	Laparoscopic vs open	Patients, *n*	Clear-cell histology, %	Fuhrman grade ≥3, %	Mean tumour size, cm	Mean follow-up, mo	Local recurrence, %	DSS, %
Antonelli et al [54]	1983–2007?	Single	Open	52	80.8	25	–	54.3	1.9	93
Becker et al [42]	1975–2004	Single	Open	69	79.7	7.2	5.3	71	0	100
Dash et al [55]	1998–2004	Single	Open	45	100	20	4.8	21*	–	–
Leibovich et al [56]	1970–2000	Single	Open	91	63.7	25	4.9	106	5.5	98.3
Pahernik et al [57]	1979–2006	Single	Open	102	71.6	10.8	5.0	56.4	1	95.8
Patard et al [58]	1984–2005	Multi	Open	247^	–	28.7	–	36	1.3	–
Patard et al [52]	1984–2001	Multi	Open	65	–	10.9	5.3	62.5	3.6	93.8
Peycelon et al [59]	1980–2005	Single	Open	61^^	77.1	24.6	5.6	70.7*	9.84	81
Simmons et al [60]	1999–2005	Single	Lap	31**	55	33	6	–	–	–
Joniau et al [69]	1997–2005	Single	Open	67	55.2	53.7	4.5*	40.2*	4	99

Conclusions: The available evidence supports elective PN as the standard surgical treatment for renal cortical tumours ≤4 cm. For larger tumours, PN has demonstrated feasibility and oncologic safety in the carefully selected patient population studied.

ΣΤΑΘΕΡΑ ΚΑΛΑ ΑΠΟΤΕΛΕΣΜΑΤΑ

0022-5347/00/1632-0442/0
THE JOURNAL OF UROLOGY®
Vol. 163, 442–445, February 2000
Printed in U.S.A.

LONG-TERM RESULTS OF NEPHRON SPARING SURGERY FOR LOCALIZED RENAL CELL CARCINOMA: 10-YEAR FOLLOWUP

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International Braz J Urol
Vol. 34 (6): 676-690, November - December, 2008

Localized Renal Cell Carcinoma Management: An Update

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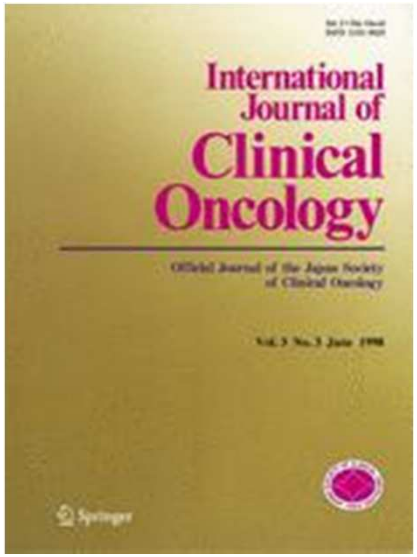
Μακρύτερο FU

***Table 3** – Published long-term outcomes for treatment of localized RCC regarding local recurrence, chronic renal disease (CRD) and cancer-specific survival.*

	Comparison	Number of Patients	Local Recurrence (%)	CRD (%)	5-year Cancer Specific Survival (%)
Dunn et al., 2000 (69)	ORN vs. LRN	33 vs. 61	-	-	92 vs. 90
Colombo et al., 2007 (19)	ORN vs. LRN	43 vs. 45	-	-	92 vs. 90
Hemal et al., 2007 (18)	ORN vs. LRN	71 vs. 41	0 vs. 0	-	94 vs. 95
Provet et al., 1991 (70)	OPN	52	2.0	-	88
Delakas et al., 2002 (71)	OPN	118	3.9	11	96
Fergany et al., 2000 (72)	OPN	107	10.3	51	88
Becker et al., 2006 (74)	OPN (< 4 cm)	241	1.4	-	97 (10-years)
Becker et al., 2006 (75)	OPN (> 4 cm)	69	5.8	-	100 (10-years)
Lee et al., 2000 (76)	ORN vs. OPN	183 vs. 79	0 vs. 0	-	100 vs. 100
Patard et al., 2004 (25)	ORN vs. OPN	1075 vs. 379	6 vs. 2	-	94 vs. 97
Corman et al., 2000 (78)	ORN vs. OPN	1291 vs. 468	-	1.2 vs. 2.3	-
Huang et al., 2006 (29)	ORN vs. OPN	204 vs. 287	-	33 vs. 77	-
Dash et al., 2006 (79)	ORN vs. OPN	151 vs. 45	-	14 vs. 13	-
Lane et al., 2007 (66)	LPN	58	1.7	-	100
Permpongkosol et al., 2006 (40)	OPN vs. LPN	58 vs. 85	-	3.4 vs. 3.5	100 vs. 98
Gill et al., 2007 (80)	OPN vs. LPN	1029 vs. 771	-	1.5 vs. 1.4	99 vs. 99 (3-years)
Gill et al., 2005 (48)	Lap CRYO	56	3.5	-	98 (3-years)
Hegarty et al., 2006 (81)	Lap CRYO	60	6.7	-	100
Sewell P et al., 2005 (45)	Lap CRYO	103	10	-	97 (3-years)
Davol et al., 2007 (47)	Lap CRYO	48	12	-	100 (3-years)
Weld et al., 2007 (49)	Lap CRYO	81	1.2	-	100 (3-years)
McDougal et al., 2005 (54)	Percut RFA	16	-	-	100 (4-years)
Stern et al., 2007 (52)	PN vs. RFA	37 vs. 40	3 vs. 7	-	100 vs. 100 (3-years)

OPN = open partial nephrectomy; ORN = open radical nephrectomy; LPN = laparoscopic partial nephrectomy; LRN = laparoscopic radical nephrectomy; Lap CRYO = laparoscopic cryoablation; Percut RFA = percutaneous radio frequency ablation.



Int J Clin Oncol
DOI 10.1007/s10147-013-0533-x

ORIGINAL ARTICLE

Evaluation of long-term outcome for patients with renal cell carcinoma after surgery: analysis of cancer deaths occurring more than 10 years after initial treatment

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Received: 29 November 2012 / Accepted: 22 January 2013

Abstract
Objective We evaluated the outcome of renal cell carcinoma (RCC) after surgery in a long-term follow-up study to elucidate the specific biological behaviors of RCC, such as late recurrence and late cancer-specific death.
Materials and methods We retrospectively reviewed the clinical and pathological features of 625 patients who were diagnosed as having renal cell carcinoma at our institution from 1975 to 2006. We analyzed the parameters and outcomes for the patients who had received radical or partial nephrectomy. Pathological staging was reviewed again by two pathologists.
Results The median age of the patients was 61 years (range 16–87). The median follow-up was 7.0 years (range 0.1–30.3). Of the 516 patients with localized or locally advanced RCC, 124 (24.0 %) had recurrence after surgery. Lung metastasis was observed most frequently. The 10-year cancer-specific survival rates were 92.4, 91.0, 64.1 and 11.8 % for stages I, II, III and IV, respectively. The late recurrence rates in patients with localized and locally advanced RCC 5 and 10 years after initial surgery were 8.5 and 3.7 %, respectively. Cancer death more than 10 years after initial treatment of the disease occurred in 16 patients. Of the 16 patients, 9 had localized disease at the time of the initial surgery. Specific findings that characterized them were not identified in these patients.
Conclusions Late recurrence of RCC is not rare. Cancer-specific death more than 10 years after the initial treatment was observed in 16 patients with localized or advanced disease. No specific findings were identified to characterize these patients with late cancer death.

Keywords Renal cell carcinoma · Postoperative surveillance · Surgery · Late recurrence · Late cancer death

Introduction

Renal cell carcinoma (RCC) accounts for 2–3 % of all adult malignant neoplasms. The number of patients diagnosed with RCC has increased because of the more frequent use of ultrasonography (US) and computed tomography (CT) for the evaluation of a variety of abdominal complaints [1]. This trend has led to an increase in the number of cases of localized RCC discovered incidentally.

Surgery is the main treatment for clinically localized disease; however, recurrence or metastasis after surgery occurs in 10–28 % of cases [2]. Although the prognosis for patients with RCC has improved since the clinical introduction of molecular targeted therapy for metastatic RCC, the likelihood of a durable complete response is quite low [3, 4]. Thus, appropriate postoperative surveillance is crucial for early detection of recurrence or metastatic disease.

Late recurrence is known as a biological behavior characteristic of RCC [5, 6]. That occurring more than 5 years after initial treatment of RCC is not a rare event [7, 8]. However, a consensus on surveillance protocols for

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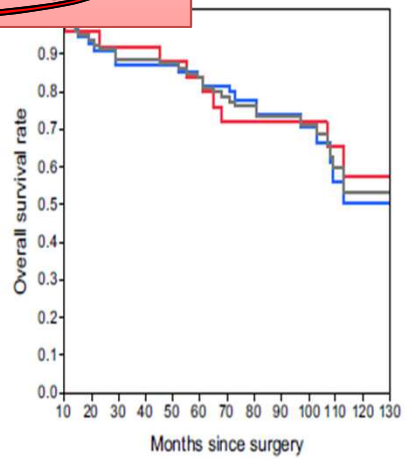
Published online: 13 February 2013

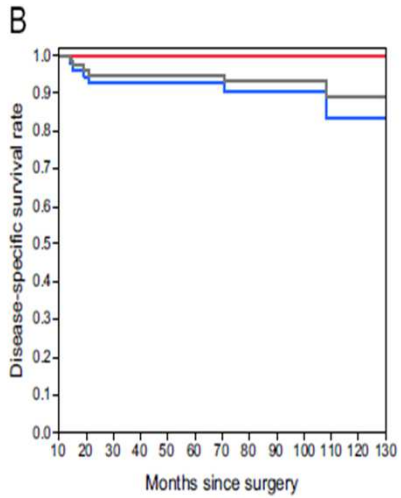
Laparoscopic Renal Cryoablation: 8-Year, Single Surgeon Outcomes

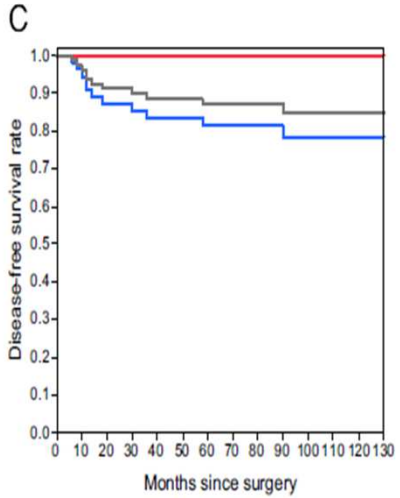
Monish Aron,* Kazumi Kamoi, Erick Remer, Andre Berger, Mihir Desai and Inderbir Gill

2010

80pt FU 5 years// 10 years		
OS	84%	51%
DSS	92%	83%
DFS	81%	78%







Excise, Ablate or Observe: The Small Renal Mass Dilemma—A Meta-Analysis and Review

2008

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	Lap PNx	CRYO	RF	Active Surveillance
Age	60	65	67	68.7
Tumor size	3.4	2.5	2.6	3
FU (mt)	54	18	16	33
Unknown pathology	0%	17.7%	42.8%	54%
Local recurrence	2.6%	4.6% RR 7.45	11.7% RR18.23	
Progress to metastasis	5.6%	1.2%	2.3%	0.9%

Μετανάλυση (99 μελέτες, 6471 όγκους)

Results of Computerized Tomography Guided Percutaneous Ablation of Renal Masses With Nondiagnostic Pre-Ablation Pathological Findings

Sompol Permpongkosol, Richard E. Link, Stephen B. Solomon and Louis R. Kavoussi*,†

88 masses
20 non-diagnostic Bx

ΜΗ ΔΙΑΓΝΩΣΤΙΚΗ Bx 22%

Nondiagnostic ablative treatment and open biopsy pathological findings

	Gill et al[16]	Cestari et al[14]	Matsumoto et al[15]	Dechet et al[12]	Tuncali et al[6]	Present Series
Procedure	Laparoscopic, cryoablation	Laparoscopic, cryoablation	Operative, laparoscopic or percutaneous, RFA	Open biopsy	Percutaneous MRI cryoablation	Percutaneous CT RFA, cryoablation
No. tumors:	36	37	64	100	17	88
RCC	20	29	41	68	10	57
Oncocytoma	3	6	5	11(benign)	—	6
Angiomyolipoma	2	—	—	—	—	4
Other	5	—	15*	—	6	1
Nondiagnostic (%)	6 (17)	2 (5.4)	3 (4.6)	21 (21)	1 (5.9)	20 (22.7)

Grade of tumor	**70-76%**
Type of tumor	92-96%
Subtype of tumor	78-92%

SOLID RENAL TUMORS: AN ANALYSIS OF PATHOLOGICAL FEATURES RELATED TO TUMOR SIZE

IGOR FRANK, MICHAEL L. BLUTE, JOHN C. CHEVILLE, CHRISTINE M. LOHSE, AMY L. WEAVER AND HORST ZINCKE

From the Departments of Urology (IF, MLB, HZ), Pathology (JCC), and Health Sciences Research (CML, ALW), Mayo Medical School and Mayo Clinic, Rochester, Minnesota

The Evolving Presentation of Renal Carcinoma in the United States: Trends From the Surveillance, Epidemiology, and End Results Program

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From the Department of Urology, Univ botic Surgery, Glickman Urological Institute

ΕΙΝΑΙ ΣΗΜΑΝΤΙΚΟ ΝΑ ΞΕΡΟΥΜΕ GRADE

Tumor size	% of tum	% of RCC that were high grade
<1cm	54%	2%
1-4cm	79%	16%
4-7cm	90%	30%
>7cm	94%	57%

Grade	size	metastases
I	2.7	1.5%
II	2.9	2.1%
III	2.9	9.4%
IV	2.9	19.3%

ΡΟΛΟΣ ΑΠΕΙΚΟΝΙΣΗΣ

Tumor volume …….was a predictor
of poor outcome in surgical patients at 10yrs

Diameter	Volume
2x2	4.3cc
2x3	8cc
3x4	22.4cc

Liou and Novick AUA 2006

On CT diameter measurements can differ by 0.5cm

ΡΟΛΟΣ ΑΠΕΙΚΟΝΙΣΗΣ

<3cm versus 3-4cm ?
Υπάρχει διαφορά?

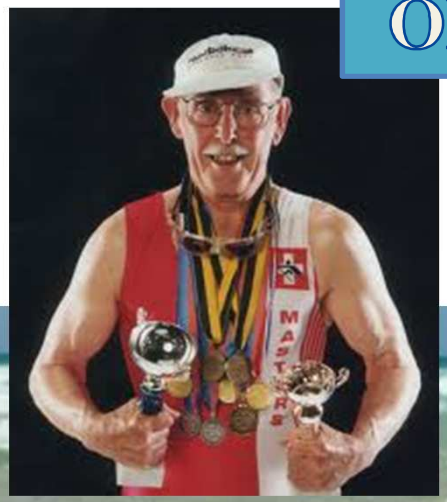
Size (cm)	Gr III/IV Mainz	Gr III/IV Vienna	pT3 Mainz	pT3 Vienna	Metastases Mainz	Metastases Vienna	Metastases UCLA
<2	7%	4%	3%	4%	3%		0%
3-4	14%	26%	12%	36%	6%	8%	8%

Pahermik, Thuroff et al J Urol 2007(178)
Remzi, Marberger et al J Urol 2006 (176)
Klatte, Beldegrun et al J Urol 2008 (179)

Patients with low-stage RCC (T1) should undergo nephron-sparing surgery rather than radical nephrectomy whenever possible.	3	B
Laparoscopic and robot assisted partial nephrectomy is an alternative to open nephron-sparing surgery.		C
Open partial nephrectomy currently remains as a standard of care for partial nephrectomy.		C
Patients with small renal tumours and/or significant co-morbidity who are unfit for surgery should be considered for an ablative approach, e.g. cryotherapy and radiofrequency ablation.		C
Other image-guided percutaneous and minimally invasive techniques, such as microwave ablation, laser ablation, and high-intensity focused ultrasound ablation are experimental and are recommended only in studies.		C

ΓΙΑ ΠΟΙΟΝ ΑΣΘΕΝΗ ΜΙΛΑΜΕ ;

ΟΓΚΟΛΟΓΙΚΟ ΑΠΟΤΕΛΕΣΜΑ



ΕΠΙΠΛΟΚΕΣ

ΕΥΧΑΡΙΣΤΩ