

MP48-17 - OUTCOMES OF PARTIAL VERSUS RADICAL NEPHRECTOMY IN OCTOGENARIAN PATIENTS: RESULTS FROM THE RESURGE PROJECT



UNIVERSITÀ
DEGLI STUDI
DI BRESCIA

Antonelli A¹, Palumbo C¹, Furlan M¹, Pavan N², Mir C³, Breda A⁴, Linares E⁵, Takagi T⁶, Rha K⁷, Porpiglia F⁸, Maurer T⁹, Yang B¹⁰, Umari P¹¹, Long JA¹², De Nunzio C¹³, Tracey A¹⁴, Ferro M¹⁵, Micali S¹⁶, Lima E¹⁷, Aguilera A⁵, Tanabe K⁶, Raheem A⁷, Bertolo R⁸, Amiel T⁹, Zang C¹⁰, Fiard G¹², Tubaro A¹³, De Cobelli O¹⁵, Bevilacqua L¹⁶, Torres J¹⁷, Bove P¹⁸, Schips L¹⁹, Castellucci R¹⁹, Perdona S²⁰, Quarto G²⁰, Celia A²¹, De Concilio B²¹, Trombetta C², Silvestri T², Mottrie A¹¹, Palou J⁴, Faba OR⁴, Capitanio U²², Larcher A²², Montorsi F²², Derweesh I²³, Bindayi A²³, Hamilton Z²³, Autorino R¹⁴

AUA-2018

INTRODUCTION

An increasing number of localized kidney cancers is being diagnosed in elderly people, raising the issue of which is the optimal surgical management in this subset of patients.

The aim of this study is **to compare surgical, functional and oncological outcomes of partial (PN) versus radical nephrectomy (RN) in a multi-institutional cohort of elderly patients** from 23 European, US and Asian Institutions (**REnal Surgery in the Elderly - RESURGE - project**).

MATERIALS AND METHODS

A retrospective analysis of the RESURGE dataset was performed, focusing on **patients ≥80 years**.

A **PN group** and a **RN group** were identified.

Differences between the two groups were measured by Pearson chi-square test and Mann-Whitney u-test.

A **multivariable Fine and Gray competing risk analysis** (including age, comorbidity, pathological tumor diameter, stage and grading and surgery) was used **to assess the relationship with cancer specific survival (CSS)**

RESULTS

585 patients: 364 (62.2%) RN and 221 (37.8%) PN

Median baseline renal function was close to CKD3 limit (RN vs PN 58.7 vs 60.4 ml/min, p=0.836).

RN group had older age and larger, more advanced and aggressive tumors at presentation and pathology.

Open, laparoscopic and robotic approaches were used in 61%, 37%, 1% and 52%, 19% and 28% of RN and PN, respectively. **Perioperative morbidity was similar** in terms of EBL and complication rates.

At 6 months, **PN showed higher residual renal function** (eGFR 51.6 vs 39.7 ml/min, p=0.001).

At a median follow-up time of 39 months, 20% of patients died due to renal cancer, 11% for unrelated causes. Competing-risk regression model showed that the **factors independently related to CSS were age and type of surgery** (SHR 1.13 and 0.44, p=0.026 and 0.052)

CONCLUSIONS

Indication to PN in octogenarian is mainly driven by tumor's features. **PN provides better preservation of renal function without increasing perioperative morbidity. PN and younger age are related to higher CSS.**

Patients' features	RN (364 patients)	PN (221 patients)	p value
Age (years), mean (± SD)	83.10 (±2.74)	82.37 (±2.07)	0.008
Sex, number (%)			0.199
M	183 (50.27%)	99 (44.80%)	
F	181 (49.73%)	122 (55.20%)	
CCI, number (%)			0.836
1-2	142 (39.0%)	103 (46.9%)	
3	46 (12.6%)	29 (8.0%)	
>3	72 (19.8%)	46 (12.6%)	
No data	104 (28.6%)	43 (19.5%)	
Preop eGFR (ml/min), mean (±SD)	58.75 (±19.70)	60.38 (±20.32)	0.358
Hypertension, number (%)			0.005
No	148 (40.7%)	60 (27.2%)	
Yes	206 (56.6%)	142 (64.2%)	
Type of surgery, number (%)			<0.001
Open	223 (61.3%)	113 (51.1%)	
Lap	135 (37.1%)	42 (19.0%)	
Robot-assisted	4 (1.1%)	62 (28.1%)	
No data	2 (0.5%)	4 (1.8%)	
Op time (min), mean (±SD)	178.77 (75.83)	162.61 (66.82)	0.020
Blood loss (ml), mean (±SD)	352.31 (396.66)	300.18 (337.70)	0.157
Complication, number (%)			0.716
No	275 (75.5%)	164 (74.2%)	
Yes	89 (24.5%)	57 (25.8%)	
cT, number (%)			<0.001
1	108 (29.7%)	171 (77.4%)	
2	163 (44.8%)	44 (20.0%)	
3	75 (20.5%)	5 (2.2%)	
4	18 (5.0%)	1 (0.4%)	
RENAL, number (%)			<0.001
4-6	33 (9.1%)	69 (31.2%)	
7-10	120 (33.0%)	69 (31.2%)	
>10	33 (9.1%)	4 (1.8%)	
pT, number (%)			<0.001
1	221 (60.7%)	147 (66.5%)	
2	49 (13.5%)	5 (2.3%)	
≥3	78 (21.4%)	10 (4.5%)	
Grading, number (%)			0.003
1-2	184 (50.5%)	123 (55.7%)	
3-4	149 (40.9%)	56 (25.3%)	
eGFR at 6-mo (ml/min), mean (±SD)	39.69 (±12.80)	51.64 (±19.27)	<0.001

1. Dept. of Urology, Spedali Civili Hospital, University of Brescia, Italy 2. Dept. of Urology, Dept. of Medical, Surgical and Health Science, University of Trieste, Italy 3. Dept. of Urology, IVO Istituto Valenciano de Oncologia, Valencia, Spain 4. Dept. of Urology, Fundació Puigvert Autònoma, University of Barcelona, Spain 5. Dept. of Urology, Hospital Universitario La Paz, Madrid, Spain 6. Dept. of Urology, Kidney Center, Tokyo Women's Medical University, Japan 7. Dept. of Urology, Yonsei University College of Medicine, Seoul, South Korea 8. Dept. of Urology, School of Medicine, San Luigi Gonzaga Hospital, University of Turin, Italy 9. Dept. of Urology, Technical University of Munich, Germany 10. Dept. of Urology, Changhai Hospital, Shanghai, China 11. Dept. of Urology, ORSI Academy, OLV Hospital, Aalst, Belgium 12. Dept. of Urology, University of Grenoble, Grenoble, France 13. Dept. of Urology, Sant'Andrea Hospital, University La Sapienza, Rome, Italy 14. Dept. of Urology, VCU Medical Center, Richmond, Virginia, USA 15. Dept. of Urology, European Oncology Institute, Milan, Italy 16. Dept. of Urology, University of Modena and Reggio Emilia, Italy 17. Dept. of Urology, CUF Urology and University of Minho, Braga, Portugal 18. Dept. of Urology, Tor Vergata University, Rome, Italy 19. Dept. of Urology, ASL Abruzzo 2, Chieti, Italy 20. Dept. of Urology, Pascale Foundation, Naples, Italy 21. Dept. of Urology, San Bassiano Hospital, Bassano del Grappa, Italy 22. Dept. of Urology, Urological Research Institute, IRCCS San Raffaele Hospital, Milan, Italy 23. Dept. of Urology, UCSD, San Diego, California, USA