

Title:

Patients' experiences on the course of treatment after partial nephrectomy or percutaneous cryoablation of small renal cell carcinoma – a cross-sectional multicenter study

Authors:

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Introduction:

The incidence of incidental findings of small renal cell carcinomas (RCC) is increasing. In curative treatment, partial nephrectomy (PN) is the gold standard, but new treatment options have emerged, such as percutaneous cryoablation (PCA). This study aimed to assess the patients' experiences on the course of treatment following PN or PCA of cT1 RCC.

Methods:

This study was a cross-sectional study. Patients who underwent PN or PCA between June 2019 and February 2021 for cT1 RCC at two university hospitals in Denmark were included consecutively. All patients underwent a multidisciplinary team conference to give the patient the best individual suggestion for treatment. Exclusion criteria were insufficient understanding of the Danish language, dementia, metastatic RCC, conversion to nephrectomy, or salvage procedures. A locally validated rehabilitation questionnaire for RCC consisting of seven questions was distributed three months postoperatively. The level of statistical significance was 5%

Results:

A total of 163 patients (PN, n=76; PCA, n=87) were included. Patients receiving PCA were significantly older (mean 67.6 vs. 62.4 years, p=0.004), had a higher Charlson Comorbidity Index (median 3 vs. 2, p=0.0001) and were treated for smaller tumors compared to PN (Mean 3.10 cm vs. 3.75 cm). Most patients reported being satisfied or very satisfied with the treatment, 91% vs. 87% treated with PN or PCA, respectively. Patients treated with PCA were more likely to think they had a complicated course after treatment (p=0.02) but were less likely to think of themselves as cancer patients than the PN group (p=0.02). Furthermore, patients treated with PN reported significantly higher regarding how often they thought about having had cancer compared to the PCA group. No further significant differences were found between the groups (Table 1).

Conclusions:

Patients treated with PN or PCA for RCC report being equally and highly satisfied with the course of treatment.

Table 1: Distribution of the patients' answers to the RQRC questionnaire

The rehabilitation questionnaire for renal cancer (RQRC)	PN (n=76)	PCA (n=87)	P value
<i>RQRC1: Have you at any time in the treatment course felt sick?***</i>			0.83*
Yes, n (%)	23 (31)	25 (29)	
No, n (%)	52 (69)	61 (71)	
<i>RQRC2: Have you ever thought of yourself as a cancer patient?****</i>			0.02*
Yes, n (%)	43 (57)	33 (38)	
No, n (%)	33 (43)	53 (62)	
<i>RQRC3: Have you ever thought of cancer recurrence in your treatment course? ^Σ</i>			0.50*
Yes, n (%)	54 (72)	57 (67)	
No, n (%)	21 (28)	28 (33)	
<i>RQRC4: Do you think that you have had a complicated course after treatment?***</i>			0.02*
Yes, n (%)	8 (11)	22 (26)	
No, n (%)	67 (89)	64 (74)	
<i>RQRC5: How do you see your body after treatment for kidney cancer?****</i>			0.56**
Not changed, n (%)	39 (51)	52 (60)	
Little changed, n (%)	30 (39)	25 (29)	
Fairly changed, n (%)	5 (7)	6 (7)	
Very changed, n (%)	2 (3)	3 (3)	
<i>RQRC6: How often do you think about the fact that you have had kidney cancer? **</i>			0.03**
Never, n (%)	8 (11)	4 (5)	
Occasionally, n (%)	15 (20)	34 (40)	
When I come to control, n (%)	41 (55)	34 (40)	
Everyday, n (%)	11 (15)	14 (16)	
<i>RQRC7: Are you satisfied with your treatment course? ^</i>			0.11**
Satisfied, n (%)	41 (55)	38 (45)	
Fairly satisfied, n (%)	27 (36)	35 (42)	
Fairly satisfied, n (%)	5 (7)	4 (5)	
Somewhat, n (%)	1 (1)	8 (9)	
Not at all, n (%)			

*Chi2, **Fishers exact, ***Based on PN n=75 and PCA n=86, ****Based on PN n=76 and PCA n=86,

^Σ Based on PN n=75 and PCA n=85, ^Based on PN n=74 and PCA n=85.

Percentages are round off. Thus, the sum varies from 99-101%.