



LONG TERM ONCOLOGIC OUTCOMES OF SURGICALLY RESECTED RENAL ONCOCYTOMA

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INTRODUCTION

- Limited data on long term outcomes of surgically resected renal oncocytoma (RO)
- Available literature largely outdated
- Uncertainty regarding follow up protocols
- *OBJECTIVE*: to define oncologic outcomes in a single institution experience.

METHODS

- 1970-2012 sporadic oncocytoma
- All specimens re-reviewed
- Yearly patient contact for follow up
- Outcomes:
 - Overall survival
 - Recurrence-free survival

RESULTS

- 561 patients
- 18% multiifocal
- Median follow up 10.6 years
- 24 recurrences

Variable	Median (IQR)
Year of surgery	2001 (1993-2007)
Age at surgery in years	68 (60-75)
eGFR at diagnosis in mL/min/1.73m ² (N=554)	64 (51-76)
Charlson score (N=560)	1 (0-2)
BMI in kg/m ² (N=548)	27.5 (24.5-31.0)
Tumor size in cm (N=552)	3.5 (2.5-5.0)
	n (%)
Male	383 (68)
eGFR at diagnosis in mL/min/1.73m ² (N=554)	
≥90	47 (8)
60 to <90	277 (50)
45 to <60	143 (26)
30 to <45	69 (12)
15 to <30	15 (3)
<15	3 (1)
Surgical approach	
Open partial nephrectomy	263 (47)
Open radical nephrectomy	214 (38)
Minimally-invasive partial nephrectomy	56 (10)
Minimally-invasive radical nephrectomy	28 (5)
Positive surgical margins	8 (1)
Multifocality	102 (18)

RESULTS

- 24 recurrences:
 - At a median of 6 years
 - Pathology:
 - 12 renal oncocytoma
 - 2 renal cell carcinoma
 - 10 unknown (unavailable from outside or undergoing surveillance without biopsy)

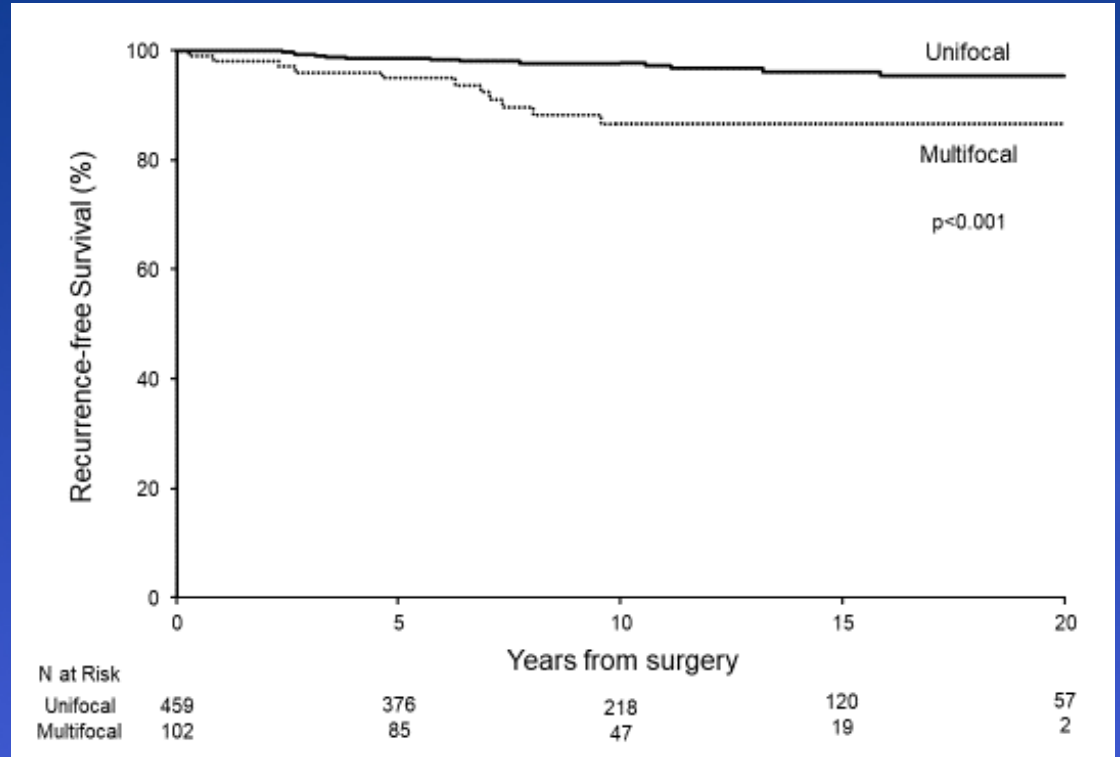
RESULTS

- Estimated overall and recurrence-free survival:

	5 years	10 years	15 years	20 years
Overall survival	88 (86-91)	70 (66-74)	53 (48-58)	35 (30-41)
Recurrence-free survival				
Entire cohort	98 (97-99)	96 (94-98)	94 (92-97)	94 (91-96)
Unifocal	99 (97-100)	98 (96-99)	96 (94-98)	95 (92-98)
Multifocal	95 (91-99)	87 (79-95)	87 (79-95)	87 (79-95)

RESULTS

- Multifocal oncocytoma more likely to recur as compared to unifocal
- HR=3.92
95% CI 1.75-8.75
p<0.001



CONCLUSION

- Patients with unifocal sporadic RO have excellent long term oncologic outcomes
- Patients with multifocal sporadic RO are at significantly increased risk of recurrence of renal tumors
- These data support a risk-adjusted approach to follow up of surgically resected RO