

Reconfiguration of renal cancer

services : benefits for patients and the

system

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Kidney cancer is changing

- * Over the last decade, kidney cancer incidence rates have increased by almost two-fifths (38%) in the UK. The increase is larger in females (40%), than in males (35%).
- * Half (50%) of kidney cancer cases in the UK each year are diagnosed in people aged 70 and over (2011-2013)

Cancer Research UK



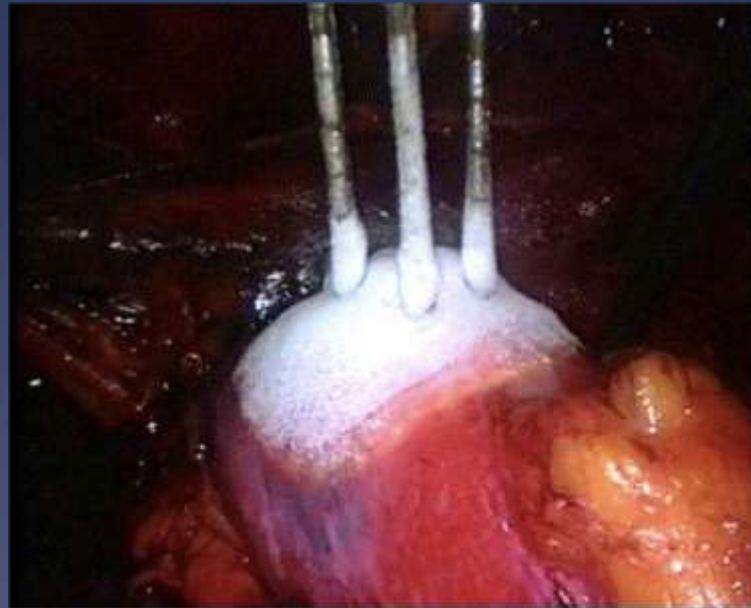
Treatments for kidney cancer have changed

- * 20 years ago-nephrectomy-removal of entire kidney
- * Partial nephrectomy-keyhole surgery with robotic assistance



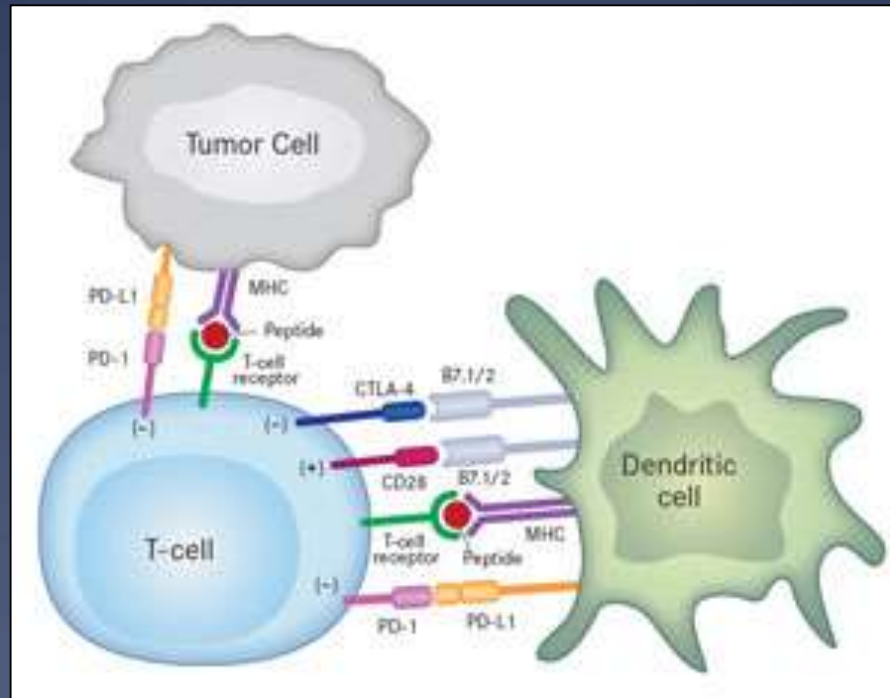
Treatments for kidney cancer have changed

* Cryotherapy



Treatments for kidney cancer have changed

- * Targeted drugs and immune -modulating drugs for patients with metastatic disease



National audit of kidney cancer surgery

- * 16 cases per year per consultant
- * 4 cases of partial nephrectomy per year per consultant

BAUS 2013-14

Aim

Single specialist centre for surgical/radiological
/oncological expertise

- * Work as a co-ordinated team across NE&North
Central London
- * Deliver as much care/investigations locally
- * Agree pathways of care

sMDT

- * Specialists-oncologists,surgeons
,radiologists,pathologists Clinical nurse specialists
- * Videoconference
- * Management plan/CNS handover

50+ cases per week.

sMDT Clinic

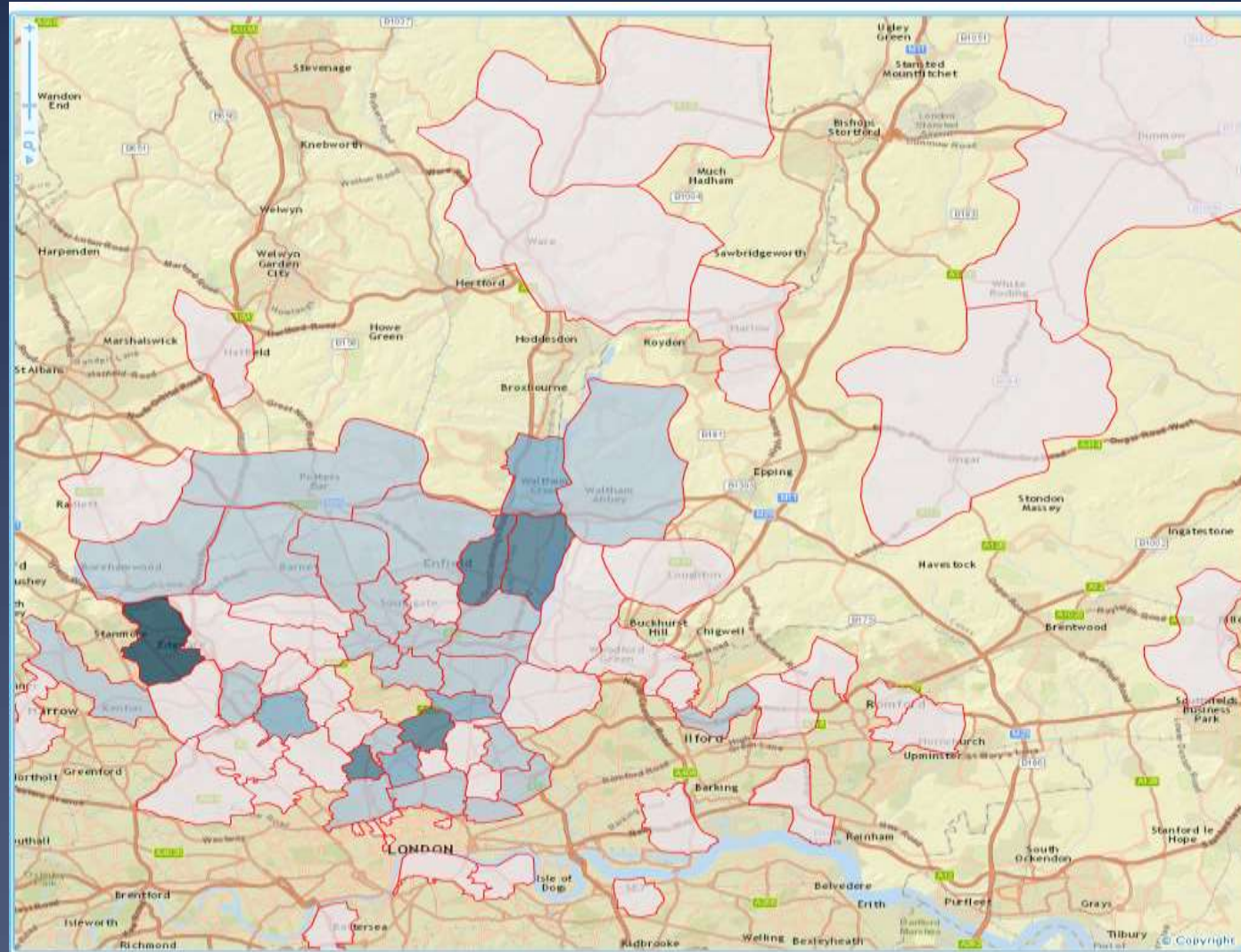
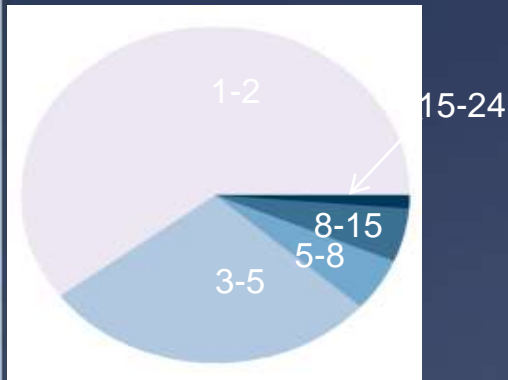
- * One stop clinic
- * Surgeons/oncologists/radiologists/CNS
- * Pre-operative assessment

Patient leaves clinic with date for surgery

Travel plan/designated parking spaces

Referral catchment 2015

Number of cases



Benefits

- * Develop and invest in new technologies

DaVinci Xi £2.2 m

- * Develop new pathways of care

- * Entry into clinical trials

- * Research/biobanking

The Small Renal Mass – changing the treatment paradigm

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Introduction and Objectives

Objective: To determine whether offering patients with small renal masses renal biopsy has an effect on the final treatment decision

- Incidentally discovered small renal masses (SRM <4cm) are the most common presentation of renal cancer
- Current Gold Standard recommends treatment – robotically assisted laparoscopic partial nephrectomy (RALPN)
- Pre-operative renal biopsy not routinely utilised
- Change of policy at Royal Free Hospital, London, offers patients with SRM pre-operative renal biopsy to aid treatment decision

Method

- October 2014 – September 2015
- 113 patients with SRM who were fit for surgery were offered pre-operative renal biopsies
- All cases reviewed at specialist MDT (sMDT)
- Ultrasound or CT guided biopsy was used depending on modality offering optimal visualisation of SRM
- Co-axial technique with 18 G biopsy needle, minimum of 2 core

Results

Diagnostic biopsy rates by tumour size, and the benign versus malignant histology by age group

Size (cm)	Initial diagnostic rate (%)	Final diagnostic rate (%)
0 – 1.5	62.50%	87.50%
1.6 – 2.0	83%	92%
2.0 – 3.0	76%	90%
3.0 – 4.0	75%	90%

Age (Years)	Benign (%)	Malignant (%)
<45	30%	70%
46 - 55	13%	87%
56 - 65	17%	83%
66 - 75	21%	79%
76 +	42%	58%

Effect on final treatment decision

-62 (55%) did not undergo RALPN

-23 with benign disease and 39 with low grade tumours – 25 opted for cryotherapy and 14 for surveillance

Conclusion

- Pre-operative biopsy of small renal masses informs patient treatment choice
- High incidence of benign lesions in younger and elderly groups allow surgical intervention to be avoided in a significant proportion of cases

Benefits:measure outcomes

- * Surgical parameters
- * Patient satisfaction

Surgical parameters

Surgical parameters

BAUS 2012-14 data

Centre	No of procedures	Complication rate(Clavien 3a or above)	Mortality rate	Transfusion rate
National Average	Median per centre 39 per annum	3.57%	0.52	8.09%
Royal Free	371	0.92%	0.26%	6.19%

Surgical parameters

4. Analysis of Current data set

The BAUS Dendrite system allows for a limited real time analysis of data by Centre. 499 cases for the Royal Free are now recorded and allow for comparison with national figures.

Time period: 2012-July 2015	No of cases	% of radical Nx performed minimally invasively	% of partial Nx performed minimally invasively	% of Nephro-ureterectomy performed minimally invasively	% positive surgical margin rate at partial Nx
National Average		69.5	49.6	87	7
Royal Free	499	76.8	84.7	100	4.6

Patient satisfaction questionnaire

Cumulative total 24 Month February 2014-february 2016

Estimated 60% response rate.

Outpatient Total: **responses 139patients**

Inpatient Total: **responses 97 Patients**

Friends and family test

- * 98% of our patients would recommend the services to friends and family who require the same treatment'

Summary key achievements

Maintained consistent high satisfaction responses for each domain majority score 98-100% maintained.

- * **Communication:** 100% of patients reported, concerns were listened to, healthcare professional was open and honest, discussion was done in a sensitive manner
- * **Information Giving:** 99% of patients reported, given enough information and it was easy to understand. Health care professional explained fully everything "I wanted to know"
- * **Shared decision making:** 100% of patients reported their view was taken into account; they had enough time to reach a decision

Patient satisfaction questionnaire

- * **Summary key concerns**

- * Lowest scoring responses: lack of Information on support services, approved sources of information opportunity to take part in research, communication with GP and who to contact out of hours

Conclusion

- * Develop high volume specialist care offering complete range of modern treatments
- * Measure outcomes to demonstrate quality of care
- * Assess and respond to patients needs and concerns