

The Learning Curve for Renal Surgery in a Twin Unit Cancer Centre in Surrey: Six Years' Experience

Introduction and Objective: Renal oncological surgery should be performed in a high-volume centre. The patient is more likely to have better outcome, shorter stay and be offered nephron-sparing surgery where appropriate. But how long does it take to become a proficient 'Renal Cancer Unit'? We present six years of data from a two hospitals where all operations have been performed by two lead surgeons. Our aim is to show that renal cancer surgery does have good outcomes when performed at a high volume unit but there is a learning curve spanning several years.

Materials and Methods: We looked retrospectively at all patients who underwent surgery for renal tumours at Frimley Park and Basingstoke Hospitals between April 2005 and April 2011. Patients who underwent robotic surgery have been excluded. We looked at operative records, patient notes, and histopathology reports. We collated data on patient demographics, mode of surgery, operative time, blood loss, complications and hospital stay. This data was then separated by year to assess improvement over time. We also looked at disease recurrence, metastases and mortality.

Results: There were 502 patients with a mean age of 65.4 years who underwent renal surgery within this time frame. Mean follow up was 38 months. There was a significant improvement in operative time, blood loss and hospital stay over time. Only 4 patients had local recurrence. There were 39 (7.7%) patients who died as a result of metastatic disease. 34 (87%) of these had undergone cytoreductive nephrectomy. One patient died due to post operative bleeding.

Conclusions: Renal cancer surgery should be performed in dedicated units which can offer open and minimally invasive approaches, and nephron-sparing surgery where appropriate. However, it must be recognized that there is a significant learning curve involved.