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P226-When polycystic kidneys are problematic: what nephrologists need to know about nephrectomy outcomes

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Introduction

Polycystic kidney disease (PKD) accounts for 7.4% of incident dialysis patients in the UK1. Such patients are typically suitable for renal transplantation, and survival outcomes are persistently good. Suitability for transplantation may be compromised if both kidneys are extremely large (precluding implantation), or if there are recurrent cyst infections (with the risk of life or graft threatening sepsis with immunosuppression). The need for nephrectomy in such cases is clear, but what is less certain is the method, scope and timing of such surgery. Traditionally open nephrectomy was the only option, however it is associated with substantial morbidity and mortality. The adoption of hand- assisted laparoscopic nephrectomy (HALN) has reportedly reduced complications.
Surgery prior to transplantation is a pre-requisite when kidney size prevents graft place- ment. When the indication is for recurrent infection the timing of nephrectomy is more controversial. Associated morbidity may be reduced in the setting of self-supporting renal transplant function compared to dialysis dependency, and may avoid the need for dialysis entirely by allowing pre-emptive living donor kidney transplantation. The potential for HLA sensitisation by blood transfusion, resulting in a reduction in immunologically suitable donors, is also of relevance in the pre-transplant cohort.
We reviewed the practice and outcome of nephrectomy in PKD patients in our region to guide nephrologists in decision-making in this area

Methods
All nephrectomy procedures in our region are performed in a single centre. Patients with PKD who underwent unilateral or bilateral nephrectomy from May 2013 to October 2018 were identified by reviewing clinical admissions with a diagnosis of nephrectomy and poly- cystic kidney disease. Data were retrospectively collected from the NI Electronic Care Record.

Results
There were 15 patients with PKD who had a nephrectomy in this period, details in Table 1.

There were no deaths. The complication rate was 33% over all, but was more likely in open surgery (50% v. 27%). Four patients required an ICU/HDU admission (mean length of stay 1 day) and 4 blood transfusion. The level of renal function at time of surgery was an important factor in outcome, details in Table 2 (5 were performed post-transplant).

Discussion
Nephrectomy is essential for some patients with PKD and has good outcomes, particularly with unilateral hand-assisted laparoscopic nephrectomy. In this cohort, blood transfusion requirement is low (11%). The complication rates increase with more advanced renal impairment. This may be an important consideration when deciding on the timing of sur- gery in relation to future transplantation.