

Removing transplant ureteric stents using the Coloplast Isiris disposable flexible cystoscope and portable monitor

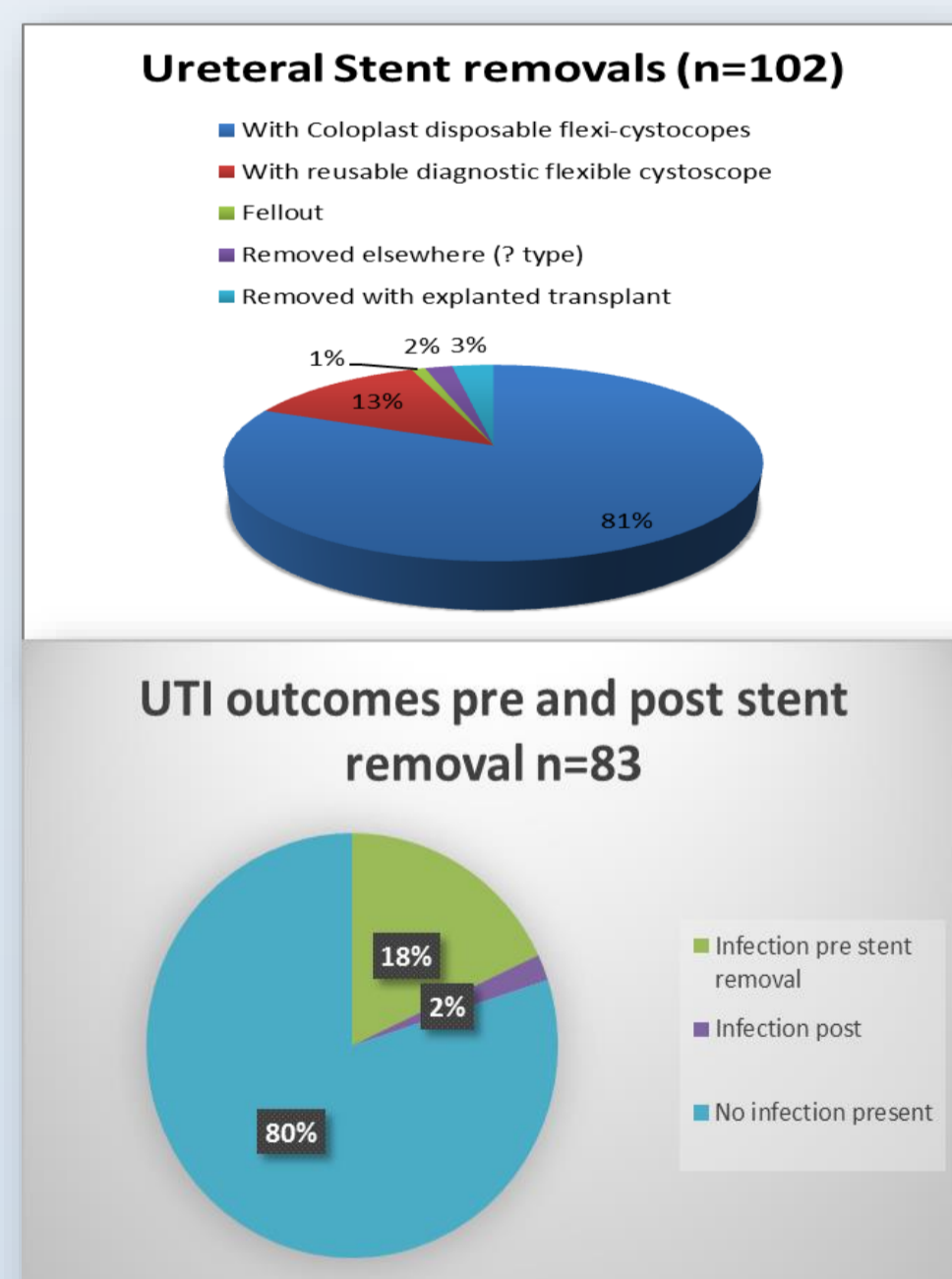
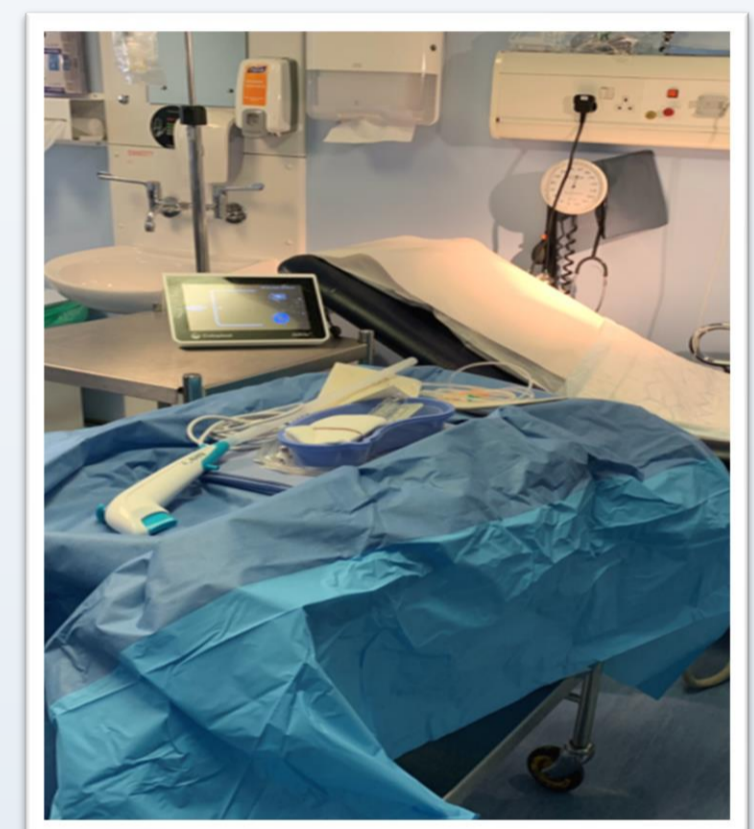
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Introduction

In our renal unit, kidney transplant ureteric stents have traditionally been removed in operating theatres using re-usable diagnostic flexible cystoscopes with stent graspers. An on-going challenge was finding suitable time slots between busy elective surgical lists. Delays in stent removals adversely affect urinary tract infection (UTI) rates and unnecessary hospital stays. At the Royal Free Hospital we introduced outpatient disposable flexible cystoscope use in a bid to alleviate these issues and improve our patient pathway. A cost-benefit analysis of this scheme was conducted before commencement.

Methods

Kidney transplant recipients had their ureteric stents removed using disposable flexible cystoscopes. Exclusion criteria: (i) patient with peritoneal dialysis catheters, scheduled for GA removal, during which their stent(s) was removed concomitantly (ii) complex urological issues (iii) patient choice. An infection control team assessed equipment and environment suitability for the procedures. Pre-procedure prophylactic antibiotics were given 30 minutes before stent removal. The procedure was performed by a specialist trained senior transplant nurse or surgical registrar with overall supervision by a consultant transplant urologist. All patients were asked to complete a pain score questionnaire. Patients were discharged after voiding and given a post procedure care leaflet.



Results

Total stent removals n=102
Coloplast (81%) n=83
Removed at other hospitals 2% (n=2)

Pre-procedure UTI rate 18% (n=15)
Post-procedure UTI rate (within 2/52) 2% (n=2)

Pain score – average 2.6 out of 10

Urological complications – 0

Patients excluded from analysis:
13 patients underwent a GA removal of PD catheter and stent. 2 patients had their stents removed at time of kidney explantation (1^o non-function). 1 patient received a magnetic stent.

Discussion

This novel approach to stent removals is preferable to day case surgery procedures. The technique is associated with less infections, pain and easier access to service thereby reducing waiting times and improving patient experience. Monetary savings are observed on equipment sterilization, appropriate use of theatre slots and staff costs. Finally, it provides an ideal setting for training both nursing and medical staff for minor procedures. Limitations to the equipment includes the restricted range of movement of the scope (cannot perform full J-manoeuvre) and therefore may not be used for diagnostic purposes.