

# PCNL in Tanzania A Unique Experience







# THE FIRST PCNL IN TANZANIA? AN EXPERIENCE

#### Authors:

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#### INTRODUCTION:

In May 2018 a small team from the BAUS subsection of Urolink visited the Kilimanjaro Christian Medical College (KCMC) in Moshi, Tanzania to undertake the first Endourology workshop in this location. This is a regional tertiary training centre for Urology in East Africa.

The acquisition of new endoscopic equipment has recently created the opportunity for endoscopic stone surgery in this location. This workshop was undertaken to establish feasibility and provide training opportunities for local Urologists.

#### METHODS:

The programme consisted of a month-long visit, with Consultant presence for the first week of intensive surgery. A senior registrar stayed for the remaining time to offer teaching, mentoring and advice to the local Urologists and Urology trainees from all over East Africa.

# **RESULTS:**

During the week, daily teaching sessions were held discussing endoscopic techniques, the evidence base for management strategies and the surgical cases for the afternoon theatre session.

Three prone PCNL cases and 2 URS cases were completed during the week with complete stone clearance being achieved in all cases. There were no immediate post-operative complications and no requirement for post-operative blood transfusion.

#### **DISCUSSION:**

We believe this workshop established feasibility and safety for endoscopic stone surgery in the setting of a developing healthcare system. To ensure sustainability further mentoring workshops will be undertaken with the opportunity for reciprocal visits of local trainees to the UK for an Observership. Urolink retains a vital role in providing expertise, training and facilitating development of modern surgical techniques in a developing healthcare system.

# INTENSIVE INTERACTIVE STONE WORKSHOP KCMC

# 7-11 May 2018

#### REPORT BY AASEM CHAUDRY

#### **OBJECTIVES:**

- 1. To train and educate the local faculty along with urology trainees on current management for renal stones focusing on URS.
- 2. To evaluate the existing facilities at KCMC for suitability to start PCNL.
- 3. To test and use the recently donated equipment by Olympus via EAU to KCMC.
- 4. Assessment of trainees after the workshop on their understanding of current Stone management.
- 5. Develop a plan to continue with progress in Endourology at KCMC.

Proceedings: Full schedule of the week to be emailed separately. Summary as below:

#### DAY 1:

AM: Introductory presentations/ lectures. Video presentation on how to perform semirigid Ureteroscopy with do's and don'ts. Case presentations.

PM: Review of all available / donated equipment and theatre facilities. The probe for the Olympus ultrasonic lithoclast required for URS found missing!

Arrangements made to use the orthopaedics theatre with C-arm for cases requiring fluoroscopy.

#### DAY 2:

AM: Trainees presentations/ Lecture on current management of Renal Tract Stones.

PM: Practical demonstration of semirigid URS in urology theatre - a diagnostic case - highlighting the principles and step-by-step demonstration of the technique.

#### DAY 3:

AM: Trainee presentations/ Lecture on Indications & technique of PCNL with tips and tricks. Case presentations.

PM: Prone PCNL for a partial staghorn using upper pole puncture using telescopic metal dilators - complete stone clearance achieved - possibly the first such case in Tanzania (Orthopaedics theatre using orthopaedic table with a few improvisations).

### DAY 4:

AM: Trainee presentations. Lecture on Flexible URS - technique/indications & video presentation. Case presentations.

PM: Presentations on medical management and stone prevention strategies. Review of EAU guidelines on Stone Management.

**Evening: Dinner with Faculty & Trainees** 

#### Day 5

AM: Prone PCNL for a 1.6cm lower pole/pelvic stone using nephromax balloon dilatation system with step by step teaching.

PM: Prone PCNL for a complex partial staghorn in a hydronephrotic poorly functioning kidney using USS guided puncture and technique for antegrade stent placement displayed.

Complete stone clearance achieved in both cases with no complications.

# SUMMARY AND RECOMMENDATIONS:

The workshop attended by 4 Consultants and 14 trainees with a lot of enthusiasm which continued to increase through the workshop. The whole event was well supported and felt like a great success. The equipment is suitable to perform URS and PCNL with further training. The absence of the correct probe for the URS prevented more Ureteroscopy cases. My focus remained on training the consultants with a lot of interaction with trainees. Presence of Dominic Teichmann was extremely helpful.

With current skills local faculty should be able to continue with Ureteroscopy for stone cases once the

correct probe arrives. More training opportunities for the faculty to continue with PCNL will be needed but is very feasible at KCMC.

Both Jack and Frank remained fully committed to the cause and were appreciative of the work done. Getting adequate supplies is likely to remain a challenge.

Trainees assessment deferred to next week due to lack of time to be undertaken by Dominic.