



Upper tract stone workshop Hawassa, November 2024

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The team travelled to Ethiopia via the well-trodden route from Terminal 2, at Heathrow, to Addis Ababa overnight. One slight glitch was that the bags which were meant to have been booked through to Awassa were off-loaded in Addis and had to be retrieved. **Apparently, this is a consequence of incoming customs regulations and is something to be aware of for any journey transiting through Addis.**

After passport control, picking up local SIM and currency from an ATM we transferred to the domestic terminal (T1); our baggage was onboarding for the next bit of the flight. At this stage it was possible to leave the terminal and go out into Addis, although all documentation for your onward flight, plus passport, are needed to get back into terminal 1.



The team at HUCSH with Tilaneh Leyeh

After the 5-hour layover there was a flawless flight down to the southern nations, where we were met by a driver from Hawassa University Comprehensive Specialised Hospital (HUCSH). He transferred us to The Oasis International Hotel. Rooms were swiftly allocated and, after a freshen up, we were met by Drs Getanah (Getch) and Tilaneh so that we could go to HUCSH and see the patients being lined up for surgery.

Matt is an early years consultant from Edinburgh who had previous experience of working in LMICs in Senegal, with Zeeshan Aslam, and as a TUF fellow at KCMC in 2023. Will is an established endourologist from Norwich who had lived in Tanzania for a year before starting medical school but had no previous experience of working in an LMIC healthcare environment.

Day 0 - 6 cases reviewed:

Patient	Gender	Age	Clinical issue
DB	M	28	Previous pyelolithotomy August 2024 – Residual stone and staghorn other side. Laterality unclear. Density 1,450 HU. For KUB to clarify
MH	F	20	RIGHT Low volume peripheral partial staghorn. Cr 0.68 For PCNL
BS	F	22	Multiple stones in RIGHT lower pole abnormality.? calyceal diverticulum but very little cortex, in part.
AW	M	64	LEFT 2-3cm renal pelvic stone for lower pole puncture PCNL
WT	M	43	Previous LEFT open renal surgery. Recurrent LEFT lower pole stone for PCNL
TS	M	38	RIGHT 1.5 – 2cm PUJ stone for PCNL



Will and the team doing the initial ward round

BS was a complex case and her symptoms, pain relief requirement and lifestyle disruption weren't considered severe enough to merit any form of intervention for an uncertain outcome. It wasn't felt that HIC options were necessarily appropriate in an LMIC setting. She will be followed up by the local team.

Day 1 – 11/11/2024

Patient	Gender	Age	Surgeon	Procedure
TS	M	38	GT/WF	RIGHT PCNL. USS guided puncture. Stone impacted at PUJ shattered with PKL. Double J stent.
AW	M	64	TL/MT	LEFT 2-3cm PCNL. Combined USS and XR-guided puncture and PKL clearance. Double J stent.



Getch dilating a track for TS. Will giving a masterclass tutorial on renal puncture with Graham's assistance.

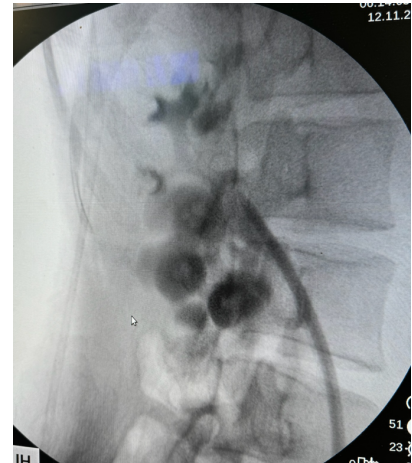
5 cases reviewed:

Patient	Gender	Age	Clinical issue
SS	M	35	BILATERAL stones. Thin cortex on R. Left kidney stented but Cr 3.9
AG	M	34	RIGHT renal pelvic calculus
YT	M	29	RIGHT 7mm proximal ureteric stone
EG	F	40	LEFT 1.5cm lower pole and 1cm pelvic stone
DB	M	28	KUB clarified RIGHT staghorn with residual stone on left

SS was a case where the right kidney was probably contributing very little to overall function. Bilateral nephrostomies are needed to optimise renal function from both sides and to determine their contribution to overall function. Not for management in this workshop; probably need a right nephrectomy and appropriate management for the left-sided stone dependent upon renal function.

Day 2 – 12/11/2024

Patient	Gender	Age	Surgeon	Procedure
WT	M	43	TT/WF	LEFT PCNL. USS guided puncture. Stone impacted in posterior pole calyx. Shattered with PKL.
MH	F	20	GT/MT	Attempted LEFT PCNL. Calyceal puncture with failure to dilate to enable sheath insertion. Track lost. For reattempt in due course. Double J stent inserted.
DB	M	28	TL/WF	LEFT PCNL with PKL. Stone clearance. Ureteric catheter left in-situ, no stent.



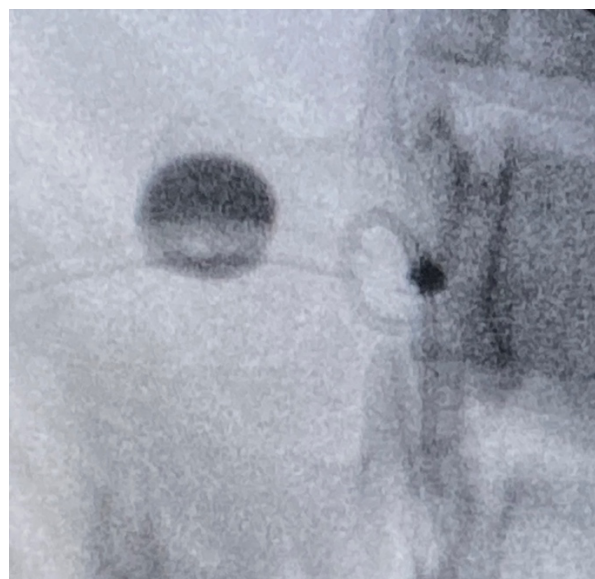
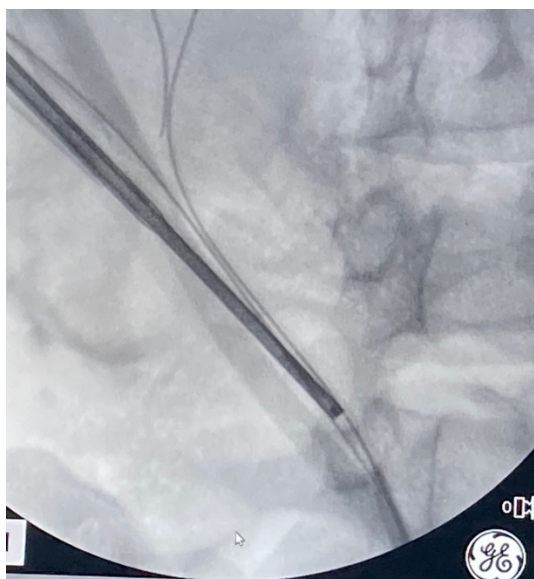
Will helping TT operate on WT. MH's intraoperative films showing the difficult collecting system with stones in the inter-polar and inferior polar calyces.

Day 3 – 13/11/2024

5 cases reviewed:

Patient	Gender	Age	Clinical review
TS	M	38	Patient well, Double J stent to remain 2/12 (Post Right PCNL). Home
AW	M	64	Patient well, removed stent himself (Post LEFT PCNL). Home
WT	M	43	Patient well (Post Left PCNL). Home
MH	F	20	Patient well. Situation explained. Stent to be removed tomorrow if remains well. For discussion in UK forum.
DB	M	28	Minimal leakage from loin (Post Left PCNL). For dressing change and removal of catheter and ureteric catheter later today if loin dry.

Patient	Gender	Age	Surgeon	Procedure
EG	F	40	TT/MT	LEFT PCNL for renal pelvic and inferior polar stones. Combined USS and XR-guided puncture and PKL clearance. Nephrostomy inserted.
YT	M	29	TL/WF	RIGHT PCNL for renal pelvic stone and upper ureteric stone. Interpolar puncture. Pelvic stone disintegrated. Proximal ureteric stone disintegrated and extracted. Double J stent inserted and 14F silicone Foley as a nephrostomy.
AG	M	34	GT/MT	RIGHT PCNL for renal pelvic stone. Direct puncture into inferior polar calyx. Stone removed virtually intact.



YT. Antegrade semi-rigid ureteroscopy. Double J stent in the renal pelvis and Foley catheter with its tip in the pelvis and the balloon in the interpolar calyx.

3 cases reviewed:

Patient	Gender	Age	Clinical issue
AD	M	48	RIGHT staghorn with lower polar extension. For lower polar/infundibular puncture.
SH	F	34	LEFT PUJ stone. For inferior polar push pull.
DK	M	47	RIGHT staghorn with interpolar component. Dilated upper pole for superior polar puncture.

Day 4 – 14/11/2024

Patient	Gender	Age	Surgeon	Procedure
AD	M	48	TL/WF	Interpolar puncture with fragmentation to complete clearance. Double J stent for fenestration – to stay 4-6 weeks. Nephrostomy inserted.
SH	F	34	TT/MT/WF	Interpolar puncture with fragmentation of impacted PUJ stone. Stone fragment pushed outside the PCC. Double J stent for fenestration – to stay 4-6 weeks. Nephrostomy inserted.
DK	M	47	GT/TL + GW/MT/WF	Difficult puncture into very tight system necessitating puncture through the Amplatz sheath x3. Inferior polar component and pelvic part disintegrated. PUJ fenestration so double J stent inserted and nephrostomy. For second look .

A ward round was carried out on 15th November to check on all the post-operative patients. All were well and there were solid plans for their pre-discharge management, the need for stent removal and any further treatment. Overall, there were 11 PCNLs carried out during

the 4 days with 1 failed access (MH) and one patient (DK) with incomplete staghorn removal, who will need a second look procedure. The local team learnt quickly, were adept at ultrasonic access because of using this to insert PCNs and had evolving expertise in the use of fluoroscopy to gain access. Each consultant had significant learning experience during the workshop, and there was plenty of learning opportunities for observers. The importance of having one designated specialist lead for the programme, and buddy operating during the experiential phase was suggested to the local team.

The local and Urolink teams met with the hospital's clinical director and emphasised the importance of urologists having dedicated access to a C-arm. This would enable them to gain greater expertise in the provision of PCNL to the 2-3 stone cases presenting for surgical intervention each day! Although he promised that negotiations would take place, the Urolink team have also contemplated looking at raising funds so that this accomplished team could have this critical piece of equipment.

Social interactions

The days were full on from the moment the airplanes tyres touched the tarmac with 8am starts each day and rare return to the hotel before 7pm. However, we were treated to a very welcome, delicious, dinner at Dr Tizazu's home on the Thursday evening and we enjoyed a boat trip on lake Hawassa on the morning before returning to the airport for the flight home.



Tilaneh, Will and Matt enjoying some of Tizazu's famous pitchers of gin and tonic, and the gang out on lake Hawassa.

A concluding overview

This being Will and Matt's first experience of endourology in an LMIC, and they both found working in a resource constrained environment a humbling experience, invaluable to their personal and professional development. Will's view of how a consultant 10 years into their

career can contribute to Urolink [can be found here](#), and Matt's opinion of the benefit to him is available via this link.

As ever, the ease with working with the Hawassa team was one of the joys of the trip. The consultants, residents, theatre and ward staff were welcoming, efficient and effective. There is no doubt that there are major changes afoot at HUCSH with an 11-theatre operating department nearing completion. There will always be a shortage of consumables in this environment, but the local team are agile and resourceful in using what is available to get the right end result for their patients.

Several research projects were discussed during the visit with an audit of stone hardness being predominant. The team had been surprised at the hardness of calculi at PCNL which made them think that there was no/little place for ESWL in managing stone disease in the Ethiopian environment. A retrospective/prospective study of stone hardness and volume from CT scans will be evolved. In addition, a prospective coding project is being worked out by Steve, with the USE team, so that there can be some sort of record of pathology and operative throughput.

This was a very successful trip. Will and Matt are eager to continue their relationship with the centre, which is encouraging as their youth will help sustain a relationship for the foreseeable future. They are planning to return for a further workshop in November 2025, as well as supporting the local team remotely in the interim.

Thanks

To BJUI for providing funding to support the stone programme at HUCSH,
to everyone at HUCSH for making us so welcome and helping with local travel even though petrol is still very hard to come by,
to everyone at Oasis International for making our stay so enjoyable,
to Mrs. Tsega for entertaining us, and feeding us, so well at her and Tizzy's beautiful home,
and finally, to BAUS for helping support Urolink in everything it does.