UROLINK team visit to University Teaching Hospital, Lusaka, Zambia

27 February to 5 March 2016

Acknowledgements

We are thankful to The Urological Foundation for funding this initiative.

We would like to express our sincere appreciation to Dr Nenad Spasojevic who worked tirelessly to deliver this workshop. We could not have done this without the excellent support from Dr Nenad. We also wish to acknowledge the particular assistance and gracious hospitality we received from Dr Victor Mapulanga and Dr Bassem Yani. Thank you to everyone for your hospitality and patience.

We would also like to acknowledge excellent support from Mike Perks, Managing Director, KARL STORZ Endoscopy (UK) Ltd for organizing a diathermy machine at such short notice and Mr Luke Gordon, Urology Business Manager, KARL STORZ Endoscopy (UK). Ltd. for delivering accessories to the airport while he was on paternity leave.

We wish to extend a special thanks to Mr Jay Patel from Lusaka for facilitating the safe delivery of essential equipment and his generous hospitality throughout our stay.

We are very grateful to PCD Diagnostics Private Limited, Harare, Zimbabwe (Mr Shaune Charters, Technical Director, Andrew Chingosho, Technical Manager) and Fidellis Masachi, Technical Executive) for their continuous support in theatre for 5 days.

We would like to acknowledge Mr Robin Benson, Coloplast for providing catheters for the workshop.

Urolink Team

Shekhar Biyani (SB)
Jon Cartledge (JC)
Nick Campain (NC)

Background

In July 2015, The Urological Foundation approved funding to support development of transurethral prostatectomy (TURP, minimally invasive procedure for benign prostate obstruction) and urethroplasty (for urethral stricture) at the Department of Urology, University Teaching Hospital, Lusaka, Zambia. In October 2015, discussion took place with Dr Nenad Spasojevic, the local link coordinator and our first trip to Lusaka was planned, the delivery of the 1st TURP Master class finalised for February 2016. Mr Jamin Bhatt, Consultant Urologist was leading on this project. Urolink team (Jaimin Bhatt, Nick Campain, and Shekhar Biyani) planned to reach Lusaka on 28th February 2016. Mr Jon Cartledge, Consultant Urologist from Leeds decided to do an exploratory trip to Lusaka and joined the team. Due to unavoidable circumstances, Mr Bhatt had to cancel his trip.

Pre-visit preparation

In Mr Bhatt's absence, we requested Mr Cartledge to help us with delivering the workshop, who very kindly took this responsibility. We booked our tickets to fly out on 27th February 2016. I was in regular contact with Dr Nenad. Three weeks before our scheduled departure, Dr Nenad informed us that the diathermy machine was not working. This caused major anxiety on both sides. Mr Bahtt managed to contact Mr Mike Perks, Managing Director of Storz who organised a replacement diathermy. Mr Perks arranged for the machine to come from Zimbabwe with 2 technicians. However, it needed custom clearance and we were worried that it may not get approval due to limited time. I approached my local friend Mr Jay Patel, for help. Without him it wouldn't have gone ahead, as, having contacted the relevant individuals in the health ministry and customs, he managed to get machine there for the 25th February 2016. This was a tremendous effort from all stakeholders. Nick visited Ms Suzie Venn, the Co-Chair of Urolink, and collected equipment and a flexible cystoscope for Lusaka. I contacted Mr Robin Benson, Coloplast, for 3-way catheters and Mr Benson delivered 20 catheters. In addition, I approached Mr Luke Gordon, Urology Business Manager for loops. I am grateful to Mr Luke Gordon, who travelled to Manchester Airport to deliver loops and cables while on his paternity leave.

We (Shekhar Biyani, John Cartledge and Nick Campain) arrived at Lusaka on Sunday. Dr Nenad was at the airport to receive us. He took us to the lodge and agreed to meet us later for an evening meal and to plan the activities for Monday.

Monday 29th February 2016

Nenad came to pick us at 07:15 hours. We reached the hospital in 30 minutes and then went to his office. Nenad went to the ward and then the theatre to organise the list. We met with all nine trainees. Nick was given the task of teaching basic of TURP to all the residents. We had planned MCQs to assess their knowledge of endoscopic equipment. Nick collected basic information on all the residents. We met the other

urology consultant, Dr Bassem Yani. I had a long chat with urology resident Dr Kalo and managed to get some idea of the workload. Mr Cartledge also chatted with Dr Bassem and discussed their needs. Mr Cartlege and I then went to theatre with Nenad and after some delay, our first patient was on the table. We were introduced to the theatre team. It was nice to meet the Consultant Anaesthetist leading on the WHO check list. Andrew Chingosho (Technical Manager) and Fidellis Masachi (Technical Executive) from PCD Diagnostics, Zimbabwe were in theatre to support (Courtesy of Storz). We (John Cartledge & Dr Victor) started with our first case. Mr Cartledge agreed to do the first TURP. The patient was in retention and the procedure became difficult due to problems with irrigation. One person was allocated to change bags. We were using 1L saline bags with 4 connectors. We ran out of 1L saline and needed to use 500 ml bags. Dr Victor Mapulanga assisted Mr Cartledge. I performed the second case. Patient had a small prostate and it went very smoothly. We lost water supply to theatre and had to cancel our third case. We stayed to clear equipment. Dr Nenad and Dennis (urology resident) washed all equipment. We got back to the hotel at 17:00 and had a light lunch.

Current structure of the urology unit is

Urology Unit I	Urology Unit II	Urology Unit III
Dr Bassem Yani (Head)	Dr Nenad (Head)	Dr Victor Mapulanga (Head)
Dr Kasoma, Senior Reg	Dr Silumbe, Senior Reg	Dr Mukosai, Senior Reg
Dr Chilando, Resident	Dr Chalwe, Resident	Dr Kalo, Resident
Dr Kaluba, Resident	Dr Eumbe, Resident	Dr Moono, Resident
Dr Savopoulos, Resident	Dr Filonov, Resident	Dr Soko, Resident
		Dr Sakala, Resident

Tuesday 1st March 2016

We had 3 cases on the list. Dr Chalwe (urology resident) informed us about the patients from Monday. Both patients were doing well. We (myself & Nenad Spasojevic) started with our first case. The patient was in retention. Rectal examination showed a 70 gm gland. Cystoscopy showed 3 stones in the bladder and occlusive prostate R > L. Unfortunately, a stone punch was not available, but Dr Bassem very kindly got one for us. After crushing the stone, we decided to do a resection of just the right lobe of the prostate, having lost time in getting the stone punch. Dr Kasoma kept a close eye on the irrigation during the procedure. This allowed a good view during resection. All residents were asked to come to theatre and in one room, Nick organised a TURP simulation on a Limbs and Things prostate model. Mr Cartledge and Mr Campain gave a short talk on how to do a TURP and Mr Cartledge showed a video. Following this, each trainee did a simulated resection. They were shown the basic skills necessary to carry out a resection. The second case was again a 70 gm prostate and Mr Cartledge performed surgery. Mr Cartledge continued to give excellent tips during the procedure. We had to cancel the third case as we had run out of time. Dr Bassem arranged lunch for the visiting faculty. Myself

and Dr Nanad decided to see theatre sister, to both say thank you and explore nursing support for theatre. Unfortunately, she was scrubbed in another theatre.
Mr Campain had brought equipment donated by Urolink. We came to Dr Nenad's office to make an inventory of all the equipment that came with us. Dr Nenad was most excited to see a flexible cystoscope. We arrived back at the lodge around 5 pm. In the evening we went out with Mr Patel for a dinner.

Wednesday 2nd March 2016

We reached the hospital at 07:45 hours. We went to Nenad office and met with Dr Munthali, Head of Surgery. Mr Cartledge went to theatre with Nenad. Nick and I went to the ward to see post-operative patients with Dr Kalo and Dr Chalwe. One patient had pyrexia but the others were doing well. We asked to remove the catheter of one of the patients done on Monday. It was interesting to see that the patients were kept fasting for almost 12 hours after spinal aneasthesia and all were on ceftrixone IV bd. Both urology residents led the ward round very well and knew their patients. Dr Chalwe showed us a case of advanced prostate cancer presenting with a mass in his left thigh. I had a discussion with Ward Manager Loveness Chanda regarding their needs. She requested teaching session for the ward staff in our future visits.
We came to theatre. Dr Nenead had started the first case under the supervision of Mr Cartledge. Due to tight stricture and urethral trauma during resctoscope insertion, the procedure was abandoned. Nick had set up the TURP simulation model. He then gave a talk on the technique of TURP and Mr Cartledge showed a video of bipolar resection. Following this, each trainee was given the chance to resect the prostate model. I went to Mable Simuchimba's (Theatre Manager) office again and finally managed to meet her. I was surprised to know that she was not aware of the workshop. I had a long chat in which I apologized for the lack of communication and assured her that she will get enough information about our future visits. Dr Kasoma performed the next case and managed to do the full procedure with Mr Cartledge unscrubbed. Dr Kasoma completed training in China and has done a small number of cases. It was disappointing as the next 2 cases had to be cancelled due to hypertension. We came back to the lodge for lunch. In the evening we, along with with Dr Nenad, went to dinner with Dr Bassem.

Thursday 3rd March 2016

We reached the hospital early. Mr Cartledge along with Nick went to the ward to see postoperative patients. I went to theatre. We managed to do 3 cases. Nick continued teaching urology residents. The residents performed resection on the simulation model. We also decided to do training on flexible cystoscopy. We devised a simulated bladder from a milk bottle (figure) and all residents, along with Dr Bassem were given a training session of flexible cystoscopy. Dr Nenad arranged a short talk to the Surgical Department for Mr Cartledge on Lapraroscopy in Urology at lunch time. This was very well received and generated some interest in laparoscopy.

We invited all urology staff for evening snacks at our lodge. Our idea was to build up a good relationship with all the members of the team and explore their needs. We had

left the hospital at 4 pm and most of the team members arrived at 7pm. We had a good social evening, which allowed us to understand the dynamics of the department and meet every one out of the workplace.

Friday 4th March 2016

Dr Nenad came to pick us up. We arrived early and Nick and I went to the ward in order to see the post-operative patients. One patient went into retention following TWOC and needed a catheter. We managed to speak to the patient's brother, as he was concerned about postoperative care. We felt that there was a need for patient information leaflets in order to reduce both the anxiety of patient's family and ward staff. Mr Cartledge went to theatre. It was planned that the diathermy machine needed to leave hospital by noon, as it needed to go back to Zimbabwe, having been on lone. We had only 2 patients on the list but one was cancelled due to low Hb. Mr Mapulanga and Mr Cartledge performed TURP. Nick and I joined the residents and did an assessment on equipment and repeated the MCQs. All the residents and consultants were asked to fill in a feedback form. We came back to theatre and had a feedback session with Dr Bassem and Dr Mapulnaga. We handed over all our equipment as well as a flexible cystoscope to Dr Mapulanga. We were concerned about the sterilization of a flexible cystoscope. Nick had a friend in the endoscopy unit and wanted to see him so Dr Mapulanga took us their. It was heartening to see the maintenance colonoscopes, gastroscopres and bronchoscopes. We had a discussion with the sister in charge regarding the flexible cystoscopy facilities in the endoscopy unit. The facilities looked ideal for a regular flexible cystoscopy list. We suggested to Dr Mapulanga to explore this and move the cystoscopy list to the endoscopy unit. I think this was most positive part of the trip. We came to Mr Patels' house for light snacks and he dropped us all off at the airport.

What went well?

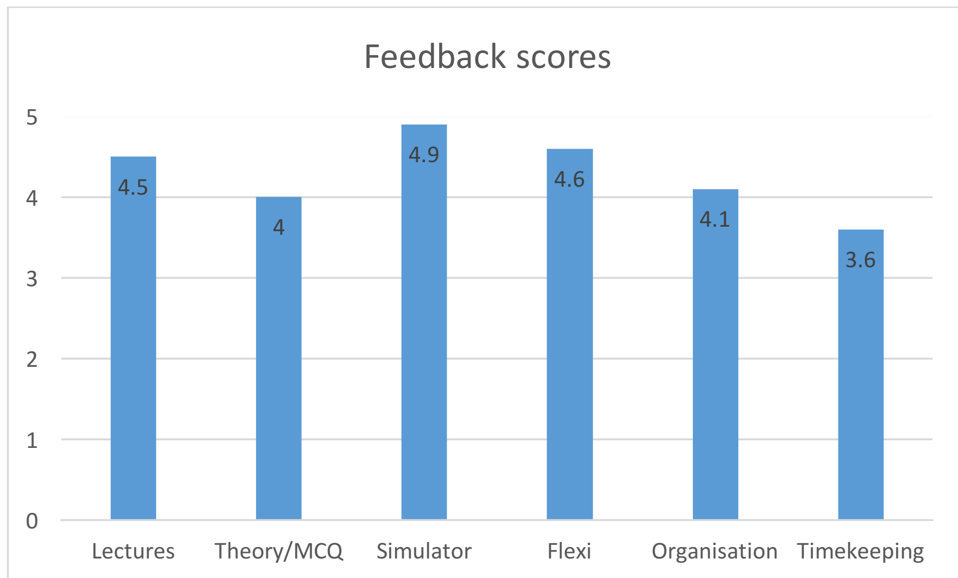
1. We managed to deliver training sessions despite having problems with the equipment. Nine TURP and one cystolitholapxy were done.
2. Mr Cartledge supported the workshop very well and was involved in the process from the start.
3. The residents received basic training on equipment, technique and complications.
4. The residents managed to perform simulated TURPs.
5. Basic training on flexible cystoscopy.
6. Excellent support from PCD Diagnostics Private Limited, Harare, Zimbabwe.
7. Mr Cartledge's lecture on laparoscopic nephrectomy was well received and generated interest in this field.
8. Dr Nenad and Mr Patel worked hard to get a diathermy machine.
9. Explored endoscopic unit for flexible cystoscopy list.

10. We managed to understand the dynamics of the unit better and had a good discussion with all consultants. We stressed on a team approach and targeted training of nominated individuals.
11. Meeting patient relative, ward sister and theatre manager.

What could have been better?

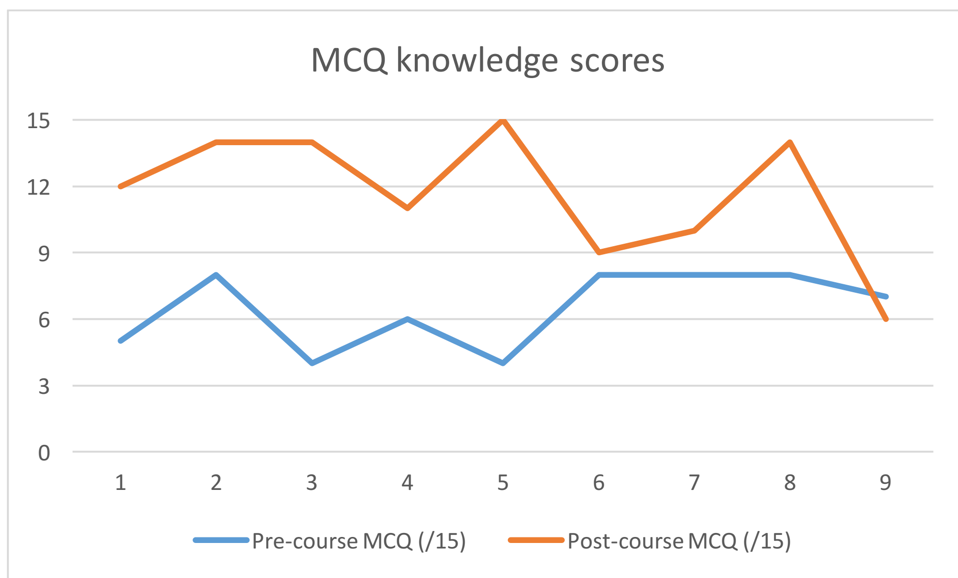
1. Objectives of the trip should be clearly discussed between local and UK coordinators.
2. There should be an introduction session with all visiting faculty and local team including the residents.
3. Coordination between consultant colleagues, theatre and ward staff.
4. Setting expectations of residents and consultants. From the discussion, it transpired that residents were under the impression that they were going to be trained on patients. Our aim was to train 2 local consultant surgeons.
5. The Theatre nurse did not scrub for any cases. Theatre staff members should be encouraged to scrub.
6. We should have asked ward staff to come to theatre to watch cases. In addition, a lecture for the ward staff on postoperative care and patient information leaflets should be considered next time.
7. One or 2 nominated surgeons for training.
8. Storage of endoscopic equipment. We should aim to have 1-2 theatre staff responsible for endoscopic urological equipment.
9. There was no structured programme for the residents.
10. Urology module of the Management of Surgical Course should be delivered during the week.
11. Dr Nenad appeared very stressed. Dr Nenad should delegate work to colleagues to minimise stress.

Participant feedback

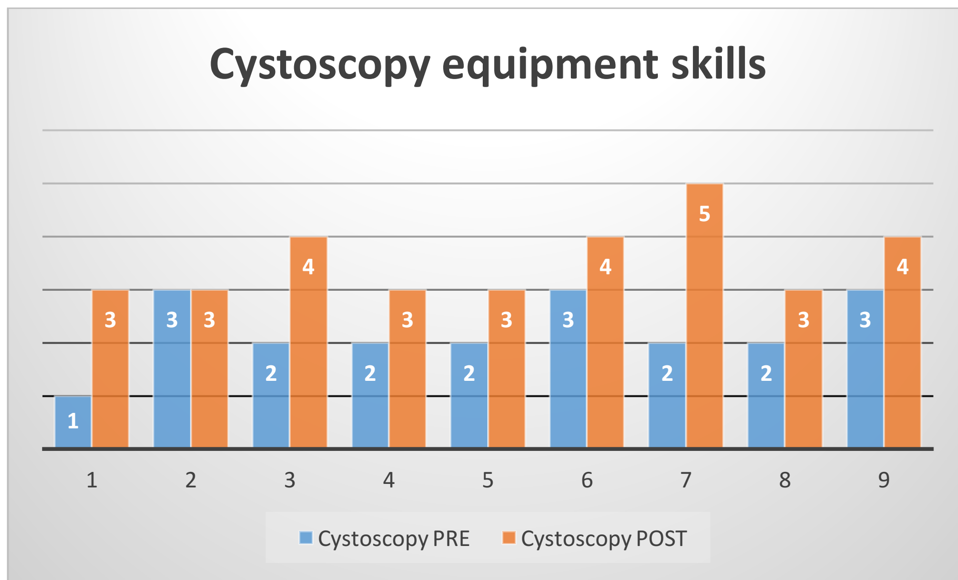


MCQ Pre/Post Test Scores

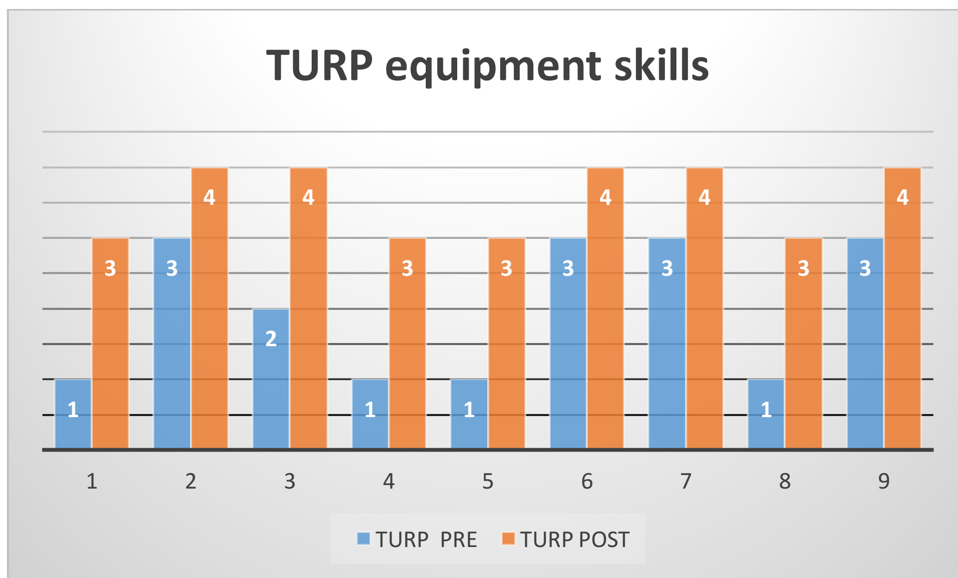
Theoretical knowledge for 9 residents demonstrated an improvement in pre and post TURP workshop scores



Cystoscopy equipment assembly assessment



TURP equipment assembly skills



Mr Biyani teaching on TURP simulator

Mr Biyani undertaking post course TURP equipment assessment

Model for Flexible Cystoscopy demonstration