Summary report on 1<sup>st</sup> Laparoscopic Urology workshop at Hospital General De Grand Yoff (HOGGY), Dakar, Senegal. 13-17<sup>th</sup> March 2017





## Team members

Dr Amar Singh (Urologist/Team leader): Erlanger Health System, Tennesse.

Dana Butler (Nurse practitioner): Erlanger Health System, Tennesse.

Dr Nittin Yerram (Resident Urology): Cleveland Clinic, Ohio

Dr Zeeshan Aslam (Urologist): Belfast City Hospital, UK

Hospital General De Grand Yoff (famously known as HOGGY), is one of the biggest teaching institute in West Africa. In addition to training Senegalese, it also serves as a teaching unit for trainees visiting from nearby West African countries such as Niger, Guinea, Chad, Ivory Coast, Burkina Faso as well as North Africa most notably Morrocco.

The urology department of Hospital General De Grand Yoff (HOGGY), over the years has been a center of excellence and premier teaching unit in West Sub-Saharan Africa. The urology department is run by 5 consultants, with Professors Gueye and Niang as the lead figures. The urology unit at HOGGY has 25-30 beds, and 2 operating theatres. The current expertise that the department has acquired as a result of workshops by IVUmed as well as other international organisations, are in Female and reconstructive urology, Uro-oncology, stone surgery (Graham Watson, Meditech trust, UK) and Paediatric Urology. The theatre set

up, clinics and diagnostic urology, inpatient care, audit and research work is all very well organised and already smoothly running at HOGGY.

On 1st day, we did case-based discussions on all the cases listed, reviewed their scans and images and planned operations with the hosts. Adequate time was spent on formal teaching on laparaosocpic access and safety principles and how to perform radical nephrectomy. The remaining 3 and half days were for operating. The breakdown of cases are:

8 cases of varicocoeles.

- 1 radical nephrectomy for a 10 cm RCC
- 1 simple nephrectomy for non-functioning kidney secondary to PUJO.
- 1 case of pyeloplasty
- 1 decortication of renal cyst

The host surgeon trained was Dr Lamine Niang who does most of the endourology work including PCNL, a skill that he has been taught by Mr Graham Watson.

Laparoscopic instruments were borrowed from surgical department of another regional teaching hospital and included, laparoscopic scissors, right-angle, hook, suction, 30 degree camera, maryland dissector and graspers. There was adequate supply of ports as well.

Scrub nurses were scrubbing up during the cases, so getting to know the instruments and surgeons' expectations.

After demonstrating the first case of varicocele, Dr Niang did the rest of the procedures under supervision. The last 2 cases (a bilateral varicoele) was done by Dr Niang and Dr Medina (junior consultant) on their own with Dr Singh not directly involved but staying in the theatre.

The 2 nephrectomies and only pyeloplasty were done by Dr Singh with Dr Niang assisting who did some basic steps such as positioning the patient, port placement, division of adhesions etc. Our team leader Dr Singh didn't think they were quiet ready for major procedures on this very first workshop, which I agreed with as well. But it was important to do these cases, as this gave us a good idea about the challenges faced in major laparoscopic procedures while working in that environment and the host team had a very useful experience about post-operative management during supervised ward rounds.

The last procedure of laparoscopic decortication of renal cyst was supervised by myself and Dr Yerram, with Dr Niang again doing parts of the procedure.

No complications were noted in any of the procedures, and patients in most cases went home the next day.

Future plans and learning messages:

This workshop was an extremely useful experience to learn how best to set up a training plan for laparoscopy in a teaching unit of developing world which would include appropriate communication and planning, patient selection and availability of instruments in good working condition.

In developed world the standard varicocoele treatment is radiological embolization while in SSA it is still treated with open surgical approach. I learned that laparoscopic varicocoele surgery is a good starting point to learn basic principles of urological laparoscopy. For more invasive procedures needing a wider range of skills, I feel pyeloplasty would be the first procedure to learn and once fully proficient to be followed up by simple nephrectomies.

The host surgeons in Africa would be best served by provision of a laparo-trainer to learn suturing and use of instruments before embarking on major procedures. Further training by visiting high volume centres overseas such as India, Pakistan, Sri Lanka would be absolutely necessary to gain experience as well.

I certainly plan to go back again in the future to continue further training and also aim to use this experience for the benefit of Urolink centres once more primary objectives are achieved and the organization feels that laparoscopy could be started in Urolink supported projects.

Thanks.