

Report on Basic and Intermediate Skills Training Course.  
Nairobi Surgical Skills Centre (NSSC) Nairobi 23<sup>rd</sup> -24<sup>th</sup> September  
2013

Faculty:

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Dr Bernard Ndung'u

NSSC staff:

Edwin Bore  
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Phillips staff:

Donald Odhiambo  
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Background:

Nairobi has been identified as one of 2 East African Centres for laparoscopic training in the COSECSA region. The University of Nairobi and Johnson and Johnson have built the Nairobi Surgical Skills Centre in the basement of the University Department of Anatomy. This was formerly opened on November 1<sup>st</sup> 2012. PG had previously run a similar course on 8<sup>th</sup>- 9<sup>th</sup> November 2012. Arrangements were made for PG to travel to Nairobi on Saturday 21<sup>st</sup> September arriving in Nairobi that evening and transferring to Sarova Panafric Hotel.

We had been warned as we were about to disembark the aircraft that there had been an 'incident' at Westgate and were told to avoid the area. This turned out to be a major terrorist attack and massacre at the shopping mall which was approx. 1km from the NSSC.

PG met up with Donald Odhiambo (Ethicon/Phillips) and Edwin Bore at the NSSC on the morning of Sunday 22<sup>nd</sup> September to check the IT systems and simulators and go through the program and presentations. The audio-visual aids and all bases were checked and replaced as necessary to make sure they were working and had all the necessary instruments. The course was to be held in the dry lab facility, which had excellent audio-visual equipment, once we had learned how to use it, with an overhead projector onto the wall and fed to all the base units. Each station was connected to an eye-level vdu. The station height allowed good ergonomic manipulation of the instruments and the vdu's were reasonably sited though perhaps could be

slightly lower and a bit further away. The picture quality was variable and in some cases very poor, which was going to make some of the more complicated tasks very challenging. The instruments were complete and all of good quality and working. The toilets were clean and with paper, wash basin, soap and towels.

Faculty and participants met up at the NSSC at 08.30 23<sup>rd</sup> September and the course started on time at 09.00.

### Course Program

#### Monday September 23<sup>rd</sup>

09.00 Introduction & History  
09.30 Equipment for Laparoscopic Surgery  
10.00 Tea/Coffee Break  
10.30 Theatre set up for Laparoscopic Surgery  
11.15 Physiological Effects of Pneumoperitoneum  
12.00 Principles of Abdominal Access Techniques, Port Positioning & Closure  
12.30 Product Overview  
13.00 Lunch  
14.00 Laparoscopic Instruments, Insertion & Use  
14.30 Basic Instrument Manipulation: Hands-on training in dry Lab –  
15.30 Coffee  
16.00 Basic Laparoscopic Dissection Techniques  
16.30 Ligation, Clipping & Extracorporeal knotting (Roeder)  
17.00 Discussion, Feedback & Questions  
17.30 Transport to the Hotel

#### Tuesday September 24<sup>th</sup>

08.30 Transfer to NSSC  
09.30 Energy Sources

- Diathermy video
- Harmonic/Enseal
- Bipolar/Monopolar

10.30 Knotting: Demonstration & Practice – Hands-on training in Dry Lab  
11.30 Suturing: Demonstration & Practice – Hand-on training in Dry Lab  
12.30 Lunch  
13.30 Diagnostic Laparoscopy  
14.00 Appendicectomy  
14.30 Closure of Perforated Ulcer  
15.00 Tea/Coffee Break  
15.30 Cholecystectomy  
16.30 Complication Recognition & Avoidance  
17.00 Evaluation & Feedback  
17.45 Conclusion

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Following the course I returned to the Sarova Panafric, having organised a late checkout. I was then able to wash, pack and have a meal for getting a taxi to the airport.

Because of the recent fire at the International Terminal the departure lounge was a tent with no facilities available!

Comments:

The course generally went very well and according to plan and was very well received. 2 of the participants were looking a little bleary-eyed as they had spent all weekend dealing with casualties from the Westgate attack. All 12 participants attended.

Edwin Bore, Priscilla Waitimu and Anne were all extremely helpful and accommodating and the technical help from all the Ethicon and NSSC staff exemplary.

The audio-visual equipment all worked very well.

The presentations all went well; but we need to tidy up some of the PowerPoint presentations and have at least the title slides with the NSSC logo. Bernard and I have now also swapped email addresses so we can liaise before the next course and distribute the presentations more evenly.

The facilities were excellent, though with the tables and chairs down the middle and the steps up to some of the bases walking round the laboratory was not without some trips.

The participants all appeared to enjoy the course and were very responsive to the teaching. Our biggest problem was getting them to stop to go for breaks. They all made incredible progress even with the more complicated and delicate tasks despite the limitations of the webcam / vdu system.

We really must upgrade the webcams. This could, I am sure, be done fairly cheaply. It is such a shame that an otherwise excellent facility is let down by the quality of the pictures.

There were 2 simulators available. Unfortunately these had initially replaced 2 of the base units meaning that 2 of the participants did not have access to the Beetle bases. We put in a further base but this still left 1 person out.

The simulators did not go down well with the participants or the faculty. They lacked some clarity in the description of the task and it took many goes before one could understand and perform the tasks. I failed to pass any of the modules! There was also no feel or feedback as you manipulated the instruments. I see no advantage of using the current simulators for basic skills but there was a cholecystectomy simulation which did provide some added value.

The basic manipulation skills were made more difficult because the graspers were not easily adapted for the tasks. A fenestrated grasper for each station would be an excellent addition to the equipment.

For the dissection we used 2 gloves with the inner glove filled with water. This proved to be a mistake as many of the stations soon became very wet. I suggest filling the inner glove with cotton wool for the next course which should provide a spongy feel without the mess.

The gloves were also used for endoloop ligation. Clipping was demonstrated but not performed at the base units.

Intracorporeal knotting and suturing was performed on the foam models provided. These were easily fixed in the bases. The participants all did extremely well on this complicated task. It was very gratifying to see their achievements and obviously gave them immense satisfaction.

We did not have a good model for appendicectomy and the stomach model's omentum was too short for the suturing of a perforated ulcer so we used a uterus and repaired the defect with the Fallopian tubes!

I await the results of the feedback which may provide further useful information on how we can improve the course.