

SSM: LAPAROSCOPIC AND ROBOTIC  
SURGERY  
LOGBOOK

Supervisor: Mr Abdul

## Monday 6/12/21

AM: Induction – Jayne/Mr Abdul

Learning points:

- Surgical knot tying techniques and practice in the training room
- Practiced suturing techniques on fake skin pads – interrupted and continuous methods
- Practised using the laparoscopic simulator to try stacking sugar cubes and suturing

## Tuesday 7/12/21

AM/PM - Observed:

3 x TLH – Mr Abdul

Learning points:

- Anatomy of the uterus including identification of the ligaments
- Process of a hysterectomy
- Different functions of laparoscopic instruments e.g. thunderbeat used for seal and seal/cut functions, harmonic uses ultrasound vibrations for cut functions
- Mr Abdul arranged for us to have a discussion with two of the Storz technicians – they explained some of the features/components involved in laparoscopic theatres, including different systems available (stack vs integrated).
- Observed a further TLH later in the day which was complicated by large fibroids on the uterus.

## Wednesday 8/12/21

Observed: TLH, laparoscopic oophorectomy – Mr Bali

Learning points:

- This was an interesting case in that initially it was thought the patient had a stage 1 uterine cancer. However, once inside it was clear the cancer was more like a stage 3. The tumours and fibroids meant the uterus was too large to extract through the vagina – the procedure was converted to a transverse laparotomy. This was also done due to the risk of cancer cells leaking out when pulling the uterus through the vaginal opening.
- Mr Bali used the 3D function of the monitors – this allowed for greater depth perception.

## Thursday 9/12/21

AM: Scrubbed in:

Left laparoscopic radical nephrectomy – Mr Williams

Learning points:

- Discussed advantages/disadvantages associated with laparoscopic surgery

- Scrubbed in and assisted in surgery doing the camerawork – learnt to always keep buttons facing up and the image horizontal, also while keeping surgeon's instruments in the middle of the screen
- Clinical skills – female catheter insertion – dirty hand/clean hand method
- Assisted in closing the patient using continuous sutures and an Aberdeen knot

## Monday 13/12/21

Mr Fareed – Laparoscopic cholecystectomy

Learning points:

- Spent time with the junior reg who was not scrubbed in but kindly talked us through each step of the surgery. We discussed anatomy surrounding the gallbladder to be wary of and the complications associated with not collecting all the loose gallstones. Also discussed pancreatitis pathophysiology and causes.
- Discussed career pathways and training experience for surgical specialties, especially general surgery.

## Tuesday 14/12/21

TLH x2 – Mr Abdul

Learning points:

- Palmer's point – an area in the left upper quadrant in mid clavicular line used when midline adhesions are suspected allowing for safe entry into the abdomen
- Ovarian ligaments and blood supply
- Classification of fibroids
- Indications for subtotal hysterectomy – e.g. if cervix is attached to the bladder

## Wednesday 15/12/21

Lap right hemicolectomy – Ms Smith

Learning points:

- Indications for a hemicolectomy
- Importance of patient positioning and testing the gas to ensure there are no leaks in the system

## Thursday 16/12/21

Observed: Left laparoscopic nephrectomy – Mr Williams

Learning points:

- Patient positioning and setting up operating table/anti slip mats etc to ensure patient remains in the same position
- Discussed preferences of laparoscopic equipment e.g. thunderbeat vs harmonic
- Anatomical landmarks used in this surgery surrounding the kidney- e.g. the vena cava, psoas muscle and identifying the adrenal glands.

Monday 14/02/2022

General Theatres – Mr Al-Khyatt

Observed: Laparoscopic cholecystectomy – Mr Al-Khyatt

Learning points:

- Different methods of removing dissected tissue after a surgery – in this case Mr Al-Khyatt used a retriever bag which manually opened and was used to remove the gallbladder and stones in one go.

Tuesday 15/02/2022

Urology Day Case – Mr Thomas

AM: Observed: Robotic Prostatectomy – Mr Thomas

Learning points:

- Principles of robotic surgery
- Mr Thomas explained the differences between laparoscopic and robotic surgery – e.g. camera differences allowing for 3D visualisation in robotics and the greater range of movements of the instruments
- Basic principles of the DaVinci robot – also saw the view of the surgeon – 3D with a much greater depth perception compared to laparoscopic monitors.

Scrubbed in: Total Abdominal Hysterectomy – Mr Abdul

Learning points:

- Assisted in this surgery using the retractors
- Mr Abdul explained the indications for an abdominal hysterectomy over a laparoscopic hysterectomy, such as malignancy.

Wednesday 16/02/2022

Observed: Laparoscopic sleeve gastrectomy – Mr Al-Khyatt

Thursday 17/02/2022

Observed: Right laparoscopic nephrectomy – Mr Williams

Learning points:

- Mr Williams was kind enough to talk me through each step of the surgery. We also discussed benefits of laparoscopic surgery such as a better ability to precisely remove cancerous tissue, shorter recovery time and cosmetic benefits due to smaller incisions.

PM: Assisted: Right laparoscopic nephrectomy – Mr Williams

Learning points:

- Spinal anaesthesia process – discussion surrounding locations for inserting needles and patient positioning
- Assisted in intubating the patient, including discussion of how to tell whether patient is intubated correctly – chest movements and tidal volumes shown on the monitor.
- Clinical skills – inserting cannulas and female catheter
- Assisted in doing camerawork throughout surgery
- Assisted in closing patient using continuous sutures and instrumental/Aberdeen knot tying.

## Monday 21/02/22

### Learning points:

- Spent some time in the training room practising skills such as suturing and tying C's and D's knots laparoscopically.

## Tuesday 22/02/22

Observed: Laparoscopic cholecystectomy – Mr Leeder

### Learning points:

- Had a discussion with Mr Leeder surrounding new technologies in surgery as a general concept, and the advantages associated with this. Also discussed potential future technologies such as virtual reality surgery.
- Mr Leeder explained the surgery steps as they were being completed – including teaching surrounding indications for cholecystectomies.

Observed: Lap hiatus hernia repair and revisional anti-reflux surgery

### Learning points:

- The use of individual suture lines to make a mesh in order to close a hernia

## Wednesday 23/02/22

Observed: TLH +/- BSO

### Learning points:

- I spoke to one of the laparoscopic technicians about the new insufflator system being introduced in the theatres. The new system maintained a constant pneumoperitoneum and allowed for constant CO2 removal, while also filtering and recirculating the gas. One of the benefits of this was reduced laparoscope smudging and a better view of the image.

### Reflections:

I have thoroughly enjoyed my SSM placement in laparoscopic and robotic surgery. It has been especially useful to spend more time getting involved in surgeries, discussing career pathways and learning more about the new technologies emerging into surgery. I feel I have

gained a greater appreciation for the preparation details which we never really receive teaching on, such as the position of the patient throughout (flat, tilted to the side, head down etc), anti-slip mats and the equipment used. I also appreciated the opportunity to experience doing camerawork in a surgery, and learning specifically about how to angle the camera and ensuring the buttons are always facing upwards – it seemed surprisingly easy to have the camera at the wrong angle without realising.

A particular highlight was seeing a robotic surgery, I found it fascinating to watch how it all worked. I discussed with Mr Thomas the advantages of robotic surgery in comparison with laparoscopic, such as the greater range of movements allowed by the robotic instruments – these made each movement seem smooth and effortless.