The Association of Coloproctology of Great Britain and Ireland

ACPGBI Travelling Fellow Report

ACPGBI Travelling fellowship report on two week visit to the Karolinska Institute (Stockholm) & Gasthuisberg (Leuven) 2016 – 2017

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Background

I am currently a post CCT fellow in abdominal wall reconstruction and advanced pelvic cancer based in the Royal Devon and Exeter Hospital. The ACPGBI kindly awarded me a £2500 fellowship to visit two international centres of excellence: the Karolinska Institute (Stockholm) & and the Gasthuisberg (Leuven) (2016 – 2017)

The Karolinska Institute (April 2016)

Karolinska is a University hospital with split sites at Huddinge and Solna in Stockholm with a total of 1700 beds. A new hospital is being built at the same site. I arrived in Stockholm late on the Sunday evening after a gruelling 11-hour journey from Devon involving 4 trains, a flight and a taxi. I was fortunately staying a hotel only a 15-minute walk from the Karolinska institute and made my way there in a suit to arrive in time for the 730am start. Doctors in Sweden arrive in casual clothes and change into scrubs for the wards and thought the idea of wearing plain clothes on a hospital ward would necessitate a 90-degree washing machine cycle at the end of the day. I dutifully put on my scrubs and went to the morning meeting.

Figure 1: The Karolinska Institute

Monday - Friday

The morning meeting consisted of trauma surgeons and the colorectal department as the Karolinska institute is a split site with upper GI at the Solna site. The night 'registrar' presented the night admissions to about 20 doctors present and we then moved onto the colorectal meeting to discuss the planned activities for the week. The first thing I noticed is that all Swedes speak fantastic English which is good as even after a week there I know about 5 Swedish words. My hosts kindly held all of the meetings that they had including specialist or networked MDTs in English. Following this we went to a joint Urology/ Gynaecology/ Colorectal MDT and then on to theatre.

Figure 2: Ward attire and hospital scooters

- The first case was a Crohn's patient who had previously undergone a sub-total colectomy. We performed a laparoscopic assisted ileorectal anastomosis. Having spoken to the surgeons I noted that they perform a lower volume of laparoscopy compared to the UK (30% laparoscopically). I was able to assist with this case and was able to give insights into my own laparoscopic experience in the case given the high volumes we perform in the UK. I see this is a great result for training programmes like 'Lapco' which demonstrates the increasing laparoscopic exposure of modern UK & Ireland colorectal trainees.

- Advanced networked colorectal MDT: 20 patients discussed all with differing combinations of aggressive T4 colorectal cancers. An example being a patient with a T4 caecal cancer invading his right kidney who had previously had pelvic radiotherapy for prostate cancer on a background of Hodgkins lymphoma. The pathologist presented the post-operative specimens during this MDT with lots of beautifully prepared macroscopic whole specimens and slides which demonstrated the extent of invasion and relation to other organs very clearly.

- After the MDT, I assisted with a pelvic exenteration which unusually was being performed for chronic pelvic sepsis. The patient had previously undergone a low

anterior resection complicated by anastomotic leak and colovesical fistula and despite a defunctioning stoma was still very symptomatic. She underwent an exenteration, the ileostomy was taken down and re-anastomosed on to the caecum and an ileal conduit fashioned. This was all done by Professor Holm with another consultant colorectal colleague. They perform hysterectomies, ileal conduits and nephrectomies without any assistance from other specialties but will work with the upper GI surgeons if a Whipple's procedure is required.

- On Wednesday after the normal meetings, I spent the day in theatre assisting with 2 right hemicolectomies. The first case had involved bulky lymph nodes and was done through a midline laparotomy with omnitract retractor. The Swedish surgeons were meticulous and took a very high ligation of the ileocolic vessels and performed an end-end sutured anastomosis. The second case was a straight-forward T2 caecal tumour again performed through an open incision. Arguably both cases could as least have been attempted laparoscopically but as I eluded to earlier they perform less cases via this approach. This is by no means a criticism of our Swedish colleagues merely an observation of how we do things differently. All of the patients had epidurals and we had some interesting discussions about my experiences with rectus sheath catheters and diamorphine spinals that we use in the Royal Devon & Exeter.

- On Thursday, I met the clinical director for the colorectal department, Professor Pelle Nilsson who was a very affable person well versed in British politics, the colorectal surgical community and lots more besides. I assisted him with one of the senior trainees to perform and extra-levator abdomino-perineal excision for a locally advanced rectal cancer with en-bloc hysterectomy and a small disc of vagina. This was done with an open approach, without mobilising the splenic flexure. Followed by a prone jack-knife ELAPE with permacol reconstruction of the pelvic floor. They use several different biological meshes in Karolinska including Permacol and Strattice.

- On Friday, my hosts very kindly invited me to present at their morning meeting as they had read and referenced a systematic review that I co-authored on the topic of colorectal anastomotic leaks. This paper led to the development of a Delphi methodology culminating in the publication of the joint ACPGBI/ ASGBI Issues in Professional Practice document on the management of anastomotic leaks. I presented the guidelines and they were interested in the Delphi method and the conclusions of the publication.

- Following the meeting I assisted with one of the emergency cases which was a 74-year-old man presenting with large bowel obstruction secondary to an obstructing caecal cancer. At laparotomy, he was noted to have carcinomatosis and a peritoneal carcinomatous index (PCI) score was taken as well as frozen section of the peritoneal nodules. They use a PCI score of 17 as a cut-off for consideration of HIPEC. The patient was defunctioned with an ileostomy and would be discussed at the next HIPEC meeting to assess his fitness and suitability for cytoreductive surgery and HIPEC. Following this the final part of the day was an international MDT for

HIPEC patients with their colleagues in Amsterdam and Aarhus to discuss challenging patients for example intra-peritoneal mesothelioma.

Figure 3: Swedish WHO checklist and the HIPEC set

Summary

In summary, this was an invaluable experience for a senior colorectal trainee. The Swedish surgeons were very accommodating, spoke excellent English and perform high quality and meticulous surgery. There is an excellent faculty present at the Karolinska with Professors Holm, Nilsson and Martling and their colleagues such as the well-known radiologist, Dr Lennart Blomqvsit. They are very knowledgeable but also keen to learn and discuss methods to improve their techniques. I was struck by the team work and lack of egos that can sometimes be prevalent in surgical departments. I have learnt lots and also been able to take part in interesting discussions and present data from ACPGBI guidelines. It has certainly reinforced my desire to pursue a career in advanced colorectal cancer and I will be looking for a longer-term fellowship to further my experience.

Learning points

- Lower volume of laparoscopic cases compared to UK
- Favour suture anastomosis for non-rectal anastomoses
- 2 Consultant operating, and independent operating with lack of input from other specialties
- High volume of recurrent and locally advanced cancers, with cytoreductive surgery/ HIPEC and international MDTs
- Long training for trainees if they want to work in a university hospital
- Specimens in MDT meeting presented by pathologist in macroscopic format very educational

University of Leuven, Gasthuisberg (December 2017)

Introduction

I went to Leuven a year after my week spent in the Karolinska institute. The University of Leuven Gasthuisberg is an enormous hospital complex with 6 cranes on the horizon as they continue to re-develop the site. In addition to all of the medical sub-specialties the campus also includes a school of medicine, nursing and pharmacology and they are currently building a proton beam facility. There are over 2000 beds and as a visitor the site is quite a challenge to negotiate. My host was Professor Andre D'Hoore and his colleague Dr Albert Wolthuis. Most hospitals in Belgium have what we call general or visceral surgeons but more specialised university hospitals like the Gasthuisberg have more sub-specialisation. Despite the enormous size there are only 8 'General' surgeons and of which 2 are colorectal surgeons. It was also a great pleasure to meet some of the Belgian registrars who have worked in Exeter following a now 19-year collaboration between Leuven and the Royal Devon and Exeter.

Figure 4: Belgian registrars Jean-Baptiste Cornille and Tine Gregoir

Mornings start at 730am with a meeting discussing the emergency admissions and then discussing all the cases that are scheduled for surgery. The Belgian surgical system has consultants or 'staff members', senior fellows and the residents (year 1 to 6). The consultants and senior fellows do most of the operating and the residents usually are second assistants. The IT system called KWR was excellent with one system combining patient background, inpatient/ outpatient consultations, laboratory results, radiological imaging, e-prescribing and operation notes. This meant that in the morning meeting each patient could be discussed and all the pertinent details were easily accessible.


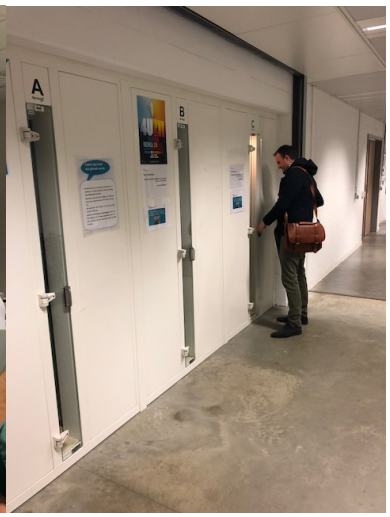

Figure 5: Daily 7.30am morning meetings and surgical scrub vending machines

Theatres

The theatre complex is new and beautifully designed. There are 53 theatres in the hospital and the gastrointestinal surgery is performed in the F complex which has 4 theatres around a central hub. All theatres are integrated and one was the designated robotic and 3D laparoscopic theatre. All of the anaesthetics were performed within the very large operating room with a large LCD screen I in the centre displaying patient observations. The real benefit of the short observerships is not only to see how international colleagues are performing surgery but also the witness the logistics of patient movement within a hospital. The Gasthuisberg recognised some of the inefficiencies of surgical patients flow through a hospital. Their solution is to have a pre-operative area where patients are cannulated/ have epidurals etc. and have all of their pre-op workup checked within the theatre complex. Following surgery identifying the common issue of lack of HDU capacity, the recovery area is a 24 hours post-operative HDU care setting. Patients can stay here for 24 hours, have the HDU care they need and then go to the surgical ward.

Operations

Day Surgery

Having toured the hospital (one of the biggest in Belgium) I went to one of the district hospitals that happens to be the smallest. The Gasthuisberg took over the management of this hospital in Diest to increase surgical capacity and they perform some of the less complex cases and bariatric surgery. The morning list comprised a laparoscopic mesh ventral rectopexy, a procedure that Prof D'Hoore was instrumental in developing. Despite the current interest in the media surrounding mesh, our Belgian colleagues feel the procedure is a safe and continue to use the procedure and always use a synthetic usually polypropylene mesh. Prof D'Hoore was keen to emphasise that this procedure is not a fix all technique and that patient selection is key. There is an overlap with functional bowel disorders with chronic pain issues which can be compounded offering surgery unnecessarily. The first patient was on the table anaesthetised, prepped and draped by 8.25am and the procedure finished by 9.10am. Anaesthetists arrive in hospital at 7am, consent is done in

clinic and throughout my stay I was very impressed at the start times. Following a routine lap VMR, there was a redo lap VMR following mesh slippage. The final patient of the morning list had a rectal prolapse of a coloanal anastomosis following rectal cancer surgery. The original operation was a low rectal TME with defunctioning loop ileostomy and appendicostomy. The ileostomy had since been reversed but the appendicostomy is left as an option for irrigation if there is poor function of the coloanal anastomosis.

I also spent a half day in day theatres with the normal combination of EUAs and treatments for benign proctology. Prof D'Hoore is an advocate for the Lungo or procedure for prolapsed haemorrhoids which I had not seen being performed for several years. They used a Lonestar retractor to clearly delineate the anatomy and told me that they have very little in the way of complications using this technique.

Main theatres

The rest of the week I was exposed to an excellent array of colorectal operations. The surgeons here are very technically accomplished laparoscopically and use this as the default approach for both elective and emergency surgery where appropriate. I was able to observe laparoscopic colectomies but also a laparoscopic TME combined with TATME for mid rectal tumour on the last day. In addition, there was a HIPEC procedure for peritoneal disease and laparoscopic assisted abdominoperineal excision via a supine Trendelenburg approach.

Other learning points

The University hospital is a centre of excellence with Prof D'Hoore driving specialisation whilst not super sub-specialising like some centres of the UK i.e. he manages functional bowel disorders, cancer, advanced disease and inflammatory bowel disease. Surgeons here have many more lists per week than we have in the UK. There appear to be less surgeons and as they do not perform endoscopy and have very experienced fellows this frees up their time not to be on site for on-call emergency work which is done as a 1:6.

Learning points

- Very large university hospital
- Centre of specialisation in colorectal surgery
- Very accomplished laparoscopically and modern techniques e.g. TATME
- Excellent operative logistics, early starts, 24-hour recovery ward stays
- Higher frequency operating lists

I would like to thank ACPGBI for funding the travelling fellowship to these two centres of excellence and to my welcoming hosts. I would recommend both institutions for any trainees wishing to observe high functioning academic surgical units in action. Both centres were very welcoming and spoke excellent English. Not only has it been highly educational it also helps forge friendships and collaboration between international colleagues.