James IV Travelling Fellowship
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PART 1

23 February

I was welcomed to the Mayo Clinic by Dr David Nagorney who took me on a ward round at the Methodist Hospital with his residents. We reviewed a number of postoperative patients who had undergone reconstructive surgery for bile duct injury, liver resection for either colorectal metastases or carcinoid tumour, and small bowel resection for obstruction due to carcinoid tumour of adhesive obstruction. I then went to St Mary's Hospital and joined Dr Michael Farnell in the operating theatre where he was undertaking a total pancreatectomy in a patient with Childs A cirrhosis who had a small pancreatic cancer. He elected to perform a total pancreatectomy rather than risk the possibility of a pancreatic anastomotic leak. We had an enjoyable conversation discussing various technical aspects of pancreatic resectional surgery. I then returned to the Mayo Clinic for an educational meeting with all the surgical residents. This was an excellent forum where the residents presented cases and were quizzed by the consultant staff. I then presented a talk entitled "Experimental and clinical aspects of pre-operative biliary drainage". The day finished with a very enjoyable meal at Michael's restaurant with the entire general surgical consultant faculty. We discussed aspects of surgical training, competency-based training and the value of a multidisciplinary team meeting.

24 February 2004

The day started in the Operating Theatre with Dr Nagorney who had a splenectomy for B cell lymphoma and a laparoscopic cholecystectomy. Between cases we discussed various technical aspects of liver resection and indications for surgical intervention in patients with cholangiocarcinoma and hepatocellular carcinoma. I then met up with Dr John Donohue who was a previous James IV traveller to Europe. As his travels had included Scotland we had a wide ranging conversation about changes in acute surgical care, specialisation in surgery and personal matters. The day finished with a journal club led by first year residents on pseudomyxomatous peritonii.

25 February 2004

Unfortunately I had to spend a day in bed with a high fever and flu-like symptoms, missing a visit to the surgical research laboratories and a dinner party hosted by Dr Mike Sarr.

26 February

Feeling slightly better, I spent an enjoyable day meeting a number of individuals. Mr Russ Rein is the Department of Surgery Administrator and he provided a managerial insight into the running of large department in the United States. The Surgical division is one the most profitable departments at Mayo. We discussed areas of inefficiency which highlighted his biggest concern being the slow turnaround of cases in theatre and how budgets for individual procedures are set. I then met up with Dr Chuck Rosen who is head of the transplant unit at the Mayo Clinic. The unit does approximately 100 liver transplants per year and has a one year

survival rate in excess of 90%. This is remarkable given the extended indications in the unit to list people for transplant with cholangiocarcinoma and metastatic neuroendocrine tumours. Of 29 liver transplants for cholangiocarcinoma including a number who had concomitant Whipples resection, only 3 patients have developed a recurrence. The unit has also undertaken 25 living-related liver transplants and it was fascinating discussing the challenges in getting this programme started as this is something being contemplated in our own unit. I then met with Dr David Farley who is programme director for the residents programme. We had a wide ranging discussion including the criteria for selecting new residents, the role of research and the in-programme assessment. We discussed differences between the UK and US programmes. As the US comes to terms with having to restrict their programmes to an 80 hour week, like the UK, they have noted the reduction in operative experience and the effect on continuity of patient care. However, all US residents still get a broad exposure to all surgical specialities and have to complete a minimum number of procedures. The average number of proceures performed by a Mayo resident during their 5 year programme is 1100 operations. Drop out rate of surgical residents is 7% at Mayo (20% US nationally). I finished the day by meeting Dr John Christein who is the GI scholar. John had done his residency training in Chicago and was doing a two year fellowship concentrating in HPB surgery.

27 February

On my final day at Mayo, I met with Dr Pairolero who is chairman of the Department of Surgery which has 69 members of staff. The division of general surgery is the largest division within the department with 11 consultants headed by Dr Mike Farnell. We discussed various aspects of case mix and I learnt that approx 45% of patients are referred from within the region, approx 52% are referred from other parts of the US and a small percentage (approx 3%) are international patients. Mayo Clinic is based in Rochester which has a population of 80,000 and therefore many patients fly to the Mayo clinic to receive their treatment. After this informative meeting, I again spent some time discussing management issues of complex liver pathologies with Dr Nagorney such as those with polycystic liver disease and non-colorectal, non-neuroendocrine liver metastases. In the afternoon I joined Dr Nagorney for a clinic when we reviewed patients with an ischaemic segment of liver following RFA and a minor controlled pancreatic fistula after Whipples resection. We also saw an interesting 39 year old lady who had been referred from another institution two years after excision of a choledochal cyst and hepaticojejunostomy, who had presented with recurrent jaundice. Review of her radiology demonstrated a long stricture involving the biliary-enteric anastomosis with separation of the right and left hepatic ducts that appeared highly suggestive of a cholangiocarcoma. We also reviewed the CT scans of a patient who had been referred with a large lesion arising from the caudate lobe but extending to the hepatic venous confluence and had the appearances of focal nodular hyperplasia. Dr Michael Sarr very kindly collected me and took me to the airport where I caught my connection to Chicago and then on to Houston.

28/29 February

Weekend break.

1 March

I was welcomed to the MD Anderson Cancer Centre by Dr Nick Vauthey who took me on a tour of the facilities including the OR, intensive care unit and surgical wards. He demonstrated the highly impressive electronic patient record system and we reviewed the details of a patient who had required portal vein embolisation prior to major liver resection. I then visited theatre and watched Dr Peter Pisters undertake a Whipples procedure in a 30 year old lady for a small ampullary tumour noting his two-layer technique for fashioning the pancreatico-jejunostomy. In the adjacent theatre I observed Dr Douglas Evans perform a very difficult Whipples procedure in a patient with an islet cell tumour of the pancreas who had undergone previous trial dissection in another institution. This patient required resection of a segment of the superior mesenteric vein with saphenous vein reconstruction. I had the opportunity to discuss with both these experts various technical issues with regard to pancreatic resections. Later in the day I met Dr Miguel Rogriguez-Bigas, a colorectal surgeon and we discussed clinical issues such as follow-up of colorectal cancer patients to identify liver metastatses and combined colorectal and liver resections in patients with synchronous resectable liver metastases. I had an interesting meeting with Dr John Skibber, another colorectal surgeon discussing some of the difficulties in developing guidelines, such as lack of an evidence base, rapidly changing technology (particularly with regard to radiological imaging) and the controversial issue of recommending centralisation of selected major surgical procedures. I then attended the colorectal clinical conference where after discussion of a few clinical cases, the oncologists debated the role and indications of Avastin.

2 March

Today was spent with Dr Doug Evans who has an interest in pancreatic and endocrine surgery. I attended the clinic with him and we reviewed patients with thyroid cancer, pancreatic cancer and mid gut carcinoid. Most interesting was to discuss and review the radiology for a patient who initially presented with obstructive jaundice and had undergone a palliative double bypass procedure in another institution for pancreatic cancer before being referred to the MD Anderson Cancer Centre for a further opinion. Here, the patient entered into a trial using preoperative chemoradiation before planned pancreatic resection. Review of the CT scans showed

radiological evidence of response to treatment. The patient was admitted for planned resection the following day. We then took rounds and reviewed a number of post-operative patients before seeing a new consultation in another ward. This interesting patient had a very clear and classical history for an insulinoma and a 2 cm lesion was demonstrated in the body of the pancreas on CT scan. The patient was offered surgery the following day. At the end of the day I attended the Liver group conference where we discussed the management of patients with hepatoma, cholangiocarcinoma, and gallbladder carcinoma. It was evident that for the cases discussed there was very similar treatments being offered on both sides of the Atlantic.

3 March

I presented a talk at the Surgical Oncology Grand Rounds entitled "Screening for and subsequent management of liver metastases. I then spent the rest of the day in theatre with Dr Doug Evans observing the two pancreatic cases seen the previous day. The first was a classical Whipples procedure and the second an enucleation of a pancreatic insulinoma in the body of the pancreas.

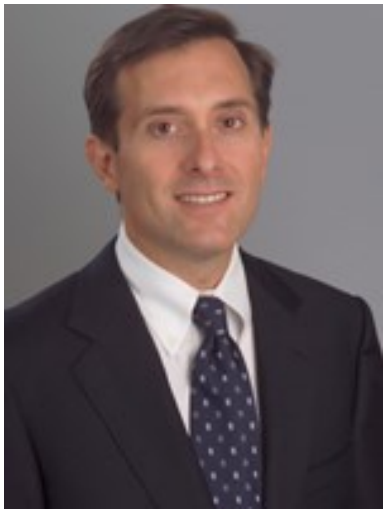
4 March

I spent the morning in theatre with Dr Stephen Curley who was operating on a young man with recurrent GIST. He had a recurrent mass in his omentum and 7 small deposits in his liver. Two of these lesions were resected and the remainder treated with RFA. We discussed the indications for and techniques of RFA. I enjoyed lunch with Dr David Madoff, an interventional radiologist who has a particular interest in portal vein embolisation. He and his team have undertaken a significant number of these procedures and are currently reviewing the effect in terms of change in liver volume prior to major hepatic resection. I then caught a flight from Houston to New York and arrived at the home of Dr Ron deMatteo and his wife Allyson.

5 March

I was met at Memorial Sloan Kettering Cancer Centre by Dr Murray Brennan and Dr Yuman Fong. The day started at 6.30 am with the Gastric and Mixed Tumour Conference where the group were discussing all their recent pancreatic trials and studies and deciding on what to study next. This was a real insight into what clinical research can be achieved with a focused tumour-specific group, high quality prospectively collected data and a significant throughput of cases. I then met with Dr Yuman Fong. It was good to catch up with a good friend and hear how he was settling into his new role as chief of the GMT service. We discussed how he was planning to build up his team of staff and his vision for the development of a state-of-the-art theatre suite with advanced image-guidance. I then met with Dr Dan Coit and discussed the need to develop improved

treatment regimens for patients with pancreatic cancer. After this I joined Dr Ron deMatteo in theatre for two very interesting cases - a right hepatectomy for a patient with hilar cholangiocarcinoma, and a Whipples procedure and right hemicolectomy for a patient with a large GIST that extended into the transverse colon and small bowel mesentry. The evening was spent at dinner in the Manhattan Café with Drs Brennan, Fong and Weiser. We had an extremely enjoyable evening discussing the history of the James IV Association, differences between British and American surgical practice and other general issues.



6 March

I spent today enjoying the sights and shops of New York and then dined in the evening with Ron & Allyson deMatteo at Vong, a fantastic Thai restaurant.

7 March

I had a very enjoyable day with Ron, Allyson and their 4 year old daughter Siena. We explored Central Park and visited the local zoo. Ron and I then took in an Ice Hockey match. This was my first experience of this very fast and competitive sport.

8 March

The day started with a research conference at which two of the residents presented short papers which they were due to present at national meetings in the coming weeks. Fellow residents and staff critiqued the presentations. This was followed by surgical grand rounds at which a visiting plastic surgeon gave a fascinating talk on the development of plastic surgical techniques using pedicled flaps, vascularised grafts and tissue expanders. Dr Brennan then took me on a tour of the research laboratory facilities. Space is a premium in New York and particularly so within the research institute, however, if programmes were being supported by research grant funding, it was evident that space was made available for active and productive groups. I was privileged to sit in on a research presentation by a new research fellow who was outlining his proposal for research in a breast cancer model. Following this I met with Dr Brennan and we discussed the challenges of being a departmental chair in a large institution. MSKCC has approximately 80 members of staff of whom approximately 60 are clinically active in 12 separate services. Dr Brennan gave me a fascinating insight into the American departmental system, the importance of recruiting top quality staff and rewarding those who brought further distinction to the institution either because of research endeavours or as a result of expansion of the clinical service. I then met up with Dr Ron deMatteo to get a guided tour of his new research laboratory and spent some time discussing with Ron and his research fellow their current focus on hepatic dentritic cells. The day finished with a hepatobiliary research conference were we discussed various preoperative and postoperative cases with liver pathology. After this it was time to depart and catch the train to Baltimore.

9 March

Impressive entrance to John Hopkins Hospital Complex

I was welcomed to Johns Hopkins Hospital by Dr Charles Yeo who outlined my programme of activities for the next few days. We then attended the surgical departmental Morbidity and Mortality Conference. This brought together all the surgical disciplines to review the previous week's M & M. I was impressed by how this was presented in a constructive way, spending more time on education and how the complications should be treated rather than apportioning blame for any complication. The chief resident for each service presented the cases and the attending staff made further comments, the conference being chaired by the chief of surgery, Dr Julie Freischlag. I then spent a good bit of the day in the operating rooms. Dr John Cameron performed a distal pancreatectomy for a pancreatic cancer in the tail of the pancreas during which we discussed many aspects of pancreatic surgery and the James IV Association. I also observed Dr Mike Choti undertaking an interesting case of a 46 year old lady who presented with right upper quadrant pain and was shown to have two lesions in the right lobe of the liver on MRI scan. These were thought to be benign, but on intraoperative ultrasound a further four lesions were identified in both lobes of the liver. He elected to undertake a wedge resection of one of these lesions and frozen section confirmed adenoma. A further wedge resection was undertaken of a superficial lesion and the remainder of the lesions were ablated with RFA. In the afternoon I met with Dr Greg Bulkley and Dr Steve Leach and learnt about many of the exciting areas of ongoing research being undertaken in Johns Hopkins. Using mouse and zebra fish models of pancreatic epithelial neoplasia, they are evaluating novel strategies for early detection, chemoprevention and therapy of this disease. The day finished with a conference of the Halsted Surgery Service discussing emergency cases managed by senior fellows.

10 March

I joined Dr Charlie Yeo in theatre for a pylorus-preserving pancreaticoduodenectomy in a young patient with a small periampullary tumour. We discussed various technical aspects of the procedure. At present the Johns Hopkins group are undertaking a randomised clinical trial evaluating the use of a temporary plastic stent in the pancreaticojejunal anastomosis. We also discussed approaches to postoperative adjuvant treatment and the differences between US and UK practice. Dr Yeo and his chief resident outlined the training opportunities available at Johns Hopkins for residents. Each resident will spend 2 months on the GI service and during this time will undertake approximately 20-30 Whipples procedures. If they subsequently do a clinical fellowship post for 1 year, they will typically do 70-80 Whipples procedures. I then went on rounds with Dr Yeo and was shown the ward facilities and the electronic patient record system. Later I met with Dr Michael Choti and we discussed his clinical practice in liver surgery and his current focus of research on the application of robotics in laparoscopic liver surgery and particularly in its potential for application in percutaneous hepatic ablation. In the evening I enjoyed a wonderful dinner with Dr Julie Freischlag, her husband and Dr Yeo. We discussed much of the history of the Johns Hopkins Hospital, particularly many of the famous surgeons such as Halsted and Blalock, and the potential benefits of exchange programmes for residents between UK and US centres.

11 March

The day started with the GI conference at which I gave a talk entitled "Management of Pancreatic Cancer in Scotland". We then discussed the radiology of a number of interesting cases. Dr Cameron presented two cases with late development of recurrent jaundice following Whipples procedure and no evidence of recurrent cancer and we considered the possibility of this being related to radiotherapy. Dr Yeo then presented an interesting case of IPMT and a case where a patient represented with abdominal pain following previous Whipple and was shown to have a cystic lesion in her pancreas. At operation he had found this to be a segment of dilated pancreatic duct on the background of chronic fibrosis of the remnant pancreas but no evidence of recurrent tumour. After this conference I joined Dr Cameron in theatre performing a classic Whipple procedure for a 79 year old man with duodenal cancer. He weighed 128 kg, had heart failure from cardiomyopathy and was on oxygen at rest, but had presented with resistant bleeding from the duodenal cancer. He was counselled regarding the very high risk of surgery, but underwent an uneventful intraoperative course and had his procedure undertaken in approximately 4 hours. It was a pleasure to have lunch with 4 surgical research fellows. We discussed the typical training of a surgical resident and the impact of reduced hours of training. The US has reduced the working week for residents to 80 hours and we compared this to the planned 56 hours in the UK. We also discussed the typical rotation of a surgical resident and the common experience that each resident will achieve. Almost all Hopkins residents will undertake 2 years of research during the residency programme and I heard about many interesting studies in cardiac surgery, transplant immunology and surgical oncology. I then met Dr Mark Talamini who has an interest in minimally invasive surgery. We discussed differences in surgical practice between the US and UK, such as private practice, turnover time in theatre and the typical workload of a

full-time clinician. We also chatted about the likely importance of health issues on the forthcoming American presidential election campaign. I finished the day and my time at Johns Hopkins with Dr Cameron. We discussed the changes in emphasis in surgical research over the past 20 years and the difficulty today in obtaining substantial long-term research support from major research funding bodies on both sides of the Atlantic. It was fascinating to listen to someone who has had a 20 year experience of leading a large surgical department and still had energy and enthusiasm for continuing his surgical practice.

12 March

After a wonderful three week experience in four outstanding HPB centres of excellence, I travelled back to Edinburgh inspired to continue developing my own HPB practice.

PART 2

The fantastic scene of Table Mountain, Cape Town

28 November

I arrived in Cape Town and was met at the airport by Professor Flip Bornman. Walking out of the airport to blue skies and warm sunshine was a pleasant change to the cold wet and grey climate I had left in Edinburgh. I was taken to Graham & Melinda Stapleton's house with whom I was to stay for the next six days. I have know Graham for many years now after he spent some time in Belfast during my time there as a surgical trainee. It was good to catch up with him and his family again and enjoy their generous hospitality. After a relaxing morning, Graham & I drove around part of the Cape and visited Hout Bay, Llandudro, Clifton, Sea Point etc taking a few photographs of the stunning scenery. I spent a wonderful evening at Professor Jake Krige's home for a Braai (BBQ), being introduced to many of the staff from Groote Schuur Hospital (GSH). This was a great start to my time in Cape Town.

29 November

I started the day with Dr Andy Nichol, head of the trauma unit at GSH and was shown around the trauma unit. GSH is the first unit in the world to have installed a body scanner, based on an x-ray device used to screen miners to ensure they didn't leave the mines with precious metals. The scanner can take an entire body x-ray in approximately 9 minutes and includes the standard chest x-ray, pelvis and lateral cervical spine x-ray. We then conducted a ward round of all the trauma patients. These were predominantly patients with gun shot wounds and we discussed the different management options. From their significant experience, the staff are now treating haemodynamically stable patients with low velocity gun shot wounds to the abdomen, including those with liver trauma non-operatively. The group have submitted a paper to the BJS reporting their experience of 32 such patients with only 1 death. The group are also undertaking a randomised trial for stable patients with cardiac tamponade comparing non-operative and operative management. To date, the only death has been in the operated group. We discussed other innovative techniques such as damage limitation surgery including the use of silk sutures to ligate perforated bowel in seriously ill patients. I was impressed with the organisation of the trauma unit and constant evaluation of techniques for all aspects of blunt and penetrating trauma. After a fascinating ward round I joined Professor Del Kahn, Head of the Department of Surgery for a ward round in the transplant unit. Like many UK centres, the unit is facing many challenges with decreasing cadaveric donors. This has led to an increase in the use of living related donors (currently 40% of all kidney transplants). After this we visited the transplant museum in the hospital which has all the memorabilia regarding the world's first heart transplant by Dr Christian Bernard. Following this, I joined Professor Jake Krige for an ERCP list – this included patients with choledocholithiasis, distal biliary stricture and one with an iatrogenic bile duct injury. We discussed many of the aspects of subsequent management of these patients. The day finished slightly early as the scheduled theatre case was cancelled, so Professor Flip Bornman took me on a wonderful drive to the Stellenbosch region – another opportunity to view the magnificent vineyards and spectacular scenary.

30 November

The day started with the HPB X-ray conference. A number of cases were presented including patients with malignant biliary strictures, liver metastases, and masses involving the head of the pancreas. Decisions were made regarding further investigations and management options. One particularly interesting case had liver metastases 9 months after resection of a retroperitoneal liposarcoma. Later in the day she underwent a left lateral sectionectomy and I joined Professor Jake Krige in theatre for this case. One of the things which impressed me was the team working between Professors Bornman and Krige. They jointly make management decisions and frequently operate together for major liver and pancreatic resections. Later in the afternoon I gave a lecture to the trainees on the "Management of acute pancreatitis" and then had a prolonged discussion on some of the challenges regarding this condition. I was taken out for dinner by some of the more senior trainees to a steak restaurant called Theo's in Camps Bay and watched the sunset over the Atlantic. We had a very wide ranging discussion on many aspects of medical training and practice, comparing the situation in South Africa to that in the UK. A trainee in Cape Town passes through three phases of training – junior, intermediate and senior. Progression

is variable but is usually determined by passing exams and doing time in particular disciplines. The junior level trainees particularly cover the trauma unit, intensive care unit and regional hospitals but get little operative experience. Operative experience is developed in the intermediate and senior phases of training at the end of which trainees write their exit exam. I got the impression that at the end of their training after usually 5 years, they would not feel confident to go into independent surgical practice and therefore most will spend a further 2 years working as a junior consultant. This type of post was likened to the old style senior registrar post in the UK and it was usually only after this additional experience that most trainees then subsequently go into private practice or look for a permanent post. One thing which was concerning the trainees nearing the end of their training was the possibility of the South African government adopting a "population limit" on the number of surgeons working in an area. If this was introduced, Cape Town and many of the other major cities would be deemed as having enough surgeons and trained surgeons would be required to go and work out in the remote and district areas. To be adequately equipped to do this requires the emphasis of training to be as a generalist. This is the opposite of the UK trend in recent years which has been towards sub-specialist training, however it reflects the training required for surgeons needed to support remote and rural practices in the UK.

1 December

I was picked up by Professor Brian Warren, Professor of Surgery at Tygerberg Hospital, University of Stellenbosch and spent the day at this institution in the northern suburbs of Cape Town. We spent some time doing a teaching ward round with a number of the registrars discussing various interesting upper GI cases. This included a patient who required a partial gastrectomy after drinking acid, patients with complicated gallstone disease and patients with pancreatic cancer. I then attended the consultant staff meeting which was followed by the departmental morbidity & mortality meeting. In addition to discussing the complications, the registrars were asked about their involvement in emergency and elective surgery over the past month, having to describe their rationale for management decisions etc. I then gave a talk on "Controversies in the management of severe acute pancreatitis". Professor Warren then brought me back to Groote Schuur Hospital were I gave a lecture entitled "Cost effective screening for colorectal metastases and their subsequent management". The day ended with a fantastic meal with Professor & Mrs Bornman, Professor & Mrs Krige and Dr & Mrs Stapleton at a restaurant called "On the Rocks" overlooking the Atlantic Ocean. I tasted some of the local produce including butternut soup and ostrich steak.

Three wonderful hosts during my stay in Cape Town
Dr Graham Stapleton, Prof Flip Bornman and Prof Jake Krige.

2 December

I joined Professors Dent, Immelman and Goldberg for a fascinating teaching ward round. The first patient had an acute corrosive oesophagitis / gastritis after ingestion of battery acid. The unit has seen over 160 such cases in the past 10 years and approximately one third of patients will require surgical intervention for either acute necrosis or late stricture. We then saw a patient who had a recurrent recto-vesical fistula but was unsuitable for further surgery because of a low CD4 count due to HIV. Another patient had a recurrent psoas abscess with no clear underlying pathology. Other interesting pathologies included a patient with subcutaneous tissue necrosis due to warfarin therapy and a patient with a large tumour mass involving the anterior abdominal wall which was felt most likely to be a dermoid. A very interesting patient had presented with a pericardial effusion due to rupture from a left lobe amoebic liver abscess. The pericardial effusion had been drained, the patient started on metronidazole and the liver abscess was due to be drained. Following the ward round we joined the radiology meeting to discuss some of the x-rays relating to patients seen on the ward round. We then had a snack and after this I met with a number of other members of staff. Professor Peter Meissner is a world expert on porphyria and I enjoyed a wonderful personal tutorial of the history of porphyria in South Africa from 1688 when the Dutch settlers arrived in the area. I then met Professor Wendy Spearman who heads up the hepatology service. We discussed many aspects of liver disease and contrasted differences between South Africa and the UK. South Africa has a very high proportion of Hepatitis B but PBC is very uncommon. As a result the indications for liver transplantation are different, but the main

challenge is that few patients are listed for transplantation because of logistical problems such as the difficulty in follow up of patients outside Cape Town with no other recognised hepatology unit in the rest of the country and nobody able to monitor immunosuppression, the high prevalence of HIV and the lack of suitable donors. Only approximately 5 liver transplants are done annually in Groote Schuur Hospital. I then met Professor Anwar Mall who has an interest in mucin research and Mr Gert Engelbrecht who runs the microvascular lab. I gave another lecture at the end of the afternoon entitled "Benefit of specialisation in the management of pancreatic cancer" and this stimulated significant discussion.

3 December

I was picked up by Dr Sebastiaan van As and taken to the Red Cross War Memorial Childrens Hospital. We started with a trauma ward round seeing a number of young children with orthopaedic and minor head injuries. The surgical staff then had organised a wonderful meeting with a series of presentations including a 20 year experience of 308 paediatric liver trauma cases (all but 16 managed conservatively), a national survey of malignant liver tumours and a case report of a young girl who developed acute pancreatitis. We had a fascinating discussion comparing differences between the paediatric and adult populations. I then was shown aroung the hospital by Professor Heinz Rode, head of the department of surgery. The hospital had a number of recent and ongoing building developments with most of the projects completed by capital raised by fund raising. On returning to Groote Schuur Hospital I joined the HPB team for a fascinating MDT conference with presentation of cases of insulinoma, gastrinoma (ZE syndrome), non-secreting neuroendocrine tumour, chronic pancreatitis and benign biliary stricture. The presentation, radiology, surgical findings and pathology were all reviewed and we had an interesting discussion on all aspects of management. Following this, it was time to say my farewells and return for a quiet evening at Graham & Melinda's.

4 December

Flight from Cape Town to Hong Kong via Johannesburg.

5 December

After catching up on a few hours sleep, I was taken for dinner by Dr Lam and his wife to Jimmy's Restaurant for some Western cuisine. Dr Lam is a senior medical officer at the Queen Mary Hospital, my next host institution. He undertook a period of training in Dundee and we enjoyed pleasant conversation discussing and comparing many aspects of life in Britain and Hong Kong.

6 December

My first appointment was with Professor John Wong who introduced me to the Surgical Department at the University of Hong Kong, Queen Mary Hospital. We discussed many of the historical and contemporary links between this great institution and Edinburgh surgery. Professor Wong outlined the administrative structure and recent achievements in research and clinical development. Despite the challenge of diminishing resources, the department continues to invest in academic pursuits

including a new Centre for Education and Training and a Skills Development Centre. Professor Wong was rightly proud of the clinical outcomes achieved in oesophageal resection, liver resection and transplantation with zero or near zero mortality even in high-risk patients. After an inspiring discussion with Professor Wong, I was taken to the operating theatre where Professor Lo and Dr Liu were undertaking a living related liver transplantation. The Hong Kong team performed the first successful adult living-related right lobe liver transplantation in 1996 and since then have further refined the technique. Professor Lo performed the donor retrieval and emphasised the importance of including the middle hepatic vein in the retrieval. The operative technique was meticulous with minimal blood loss. The implant was performed by Dr Liu and utilised an end-to-side anastomosis between the reconstituted right and middle hepatic vein to the inferior vena cava. Reperfusion was done via the portal vein and then the microvascular surgeons reconstituted the hepatic artery using the operating microscope. The unit performs approximately 70 liver transplants per year and two thirds of these are now living-related because of the shortage of cadaveric donors. With the prospect of possibly developing a living-related liver transplant program in Edinburgh, this was a remarkable insight into many of the technical aspects of this procedure.

7 December

I gave a lecture to the Department of Surgery entitled “Clinical Aspects in the Management of Pancreatic Cancer”. I was then shown around the hospital by Drs Liu and Chan. I was shown the 20 bedded Intensive Care Unit and we reviewed the two patients operated on the previous day. We then toured the HPB ward unit and I was shown a number of patients with HCC, cholangiocarcinoma and biliary complications following transplantation. A number of patients who undergo liver transplantation in mainland China come to the Queen Mary Hospital for their follow up and often these patients require further surgical intervention. We visited the Skills Development Centre. This fantastic facility was established in 1996 with a generous grant from the Hong Kong Jockey Club. It is 250 m2 and can house up to 48 surgeons for training in procedures ranging from simple knot tying to laparoscopy and thoracoscopy. The centre also has a 60 seat seminar room with links to operating theatres, an Endoscopic unit for live demonstations and a video viewing library with 6 stations for lectures, demonstrations, group discussions and evaluations. We then visited the Surgical Endoscopy Centre where the surgeons undertake all their luminal endoscopy, endoscopic ultrasound, and ERCP procedures. The workload is heavy with approximately 12,000 procedures performed annually. We also visited the Vascular Disease Centre, the Surgical Day Centre and the Surgical Outpatient Unit. I was then taken to the Research Facilities in the Faculty of Medicine Building and met with Dr John Luk, Associate Professor, and a number of the current research staff. We enjoyed a beautiful lunch and then toured the 1800 m2 facility. This was a truly magnificent research laboratory with tissue culture facilities, a histopathology facility, equipment rooms, tissue / blood banks and an animal laboratory. I listened to 4 presentations from current research staff on studies ranging from gastric cancer, hepatocellular cancer and transplantation and we had a enjoyable afternoon discussing recent findings. The unit has an impressive publication with approximately 40 puiblications this year in high impact factor journals. In the evening I experienced a wonderful Chinese meal with Professor Fan and Dr WK Yuen. We discussed many

topics including music, cuisine, surgical training, funding of health care and what I would likely experience on my trip to mainland China.

8 December

I took a flight from Hong Kong to Hangzhou in China. I was met by Professor Peng and a number of his surgical colleagues and stayed in a beautiful hotel on West Lake (below).

9 December

After breakfast, I was driven to the Sir Run Run Shaw Hospital where I met Professor Peng. He undertook a right hepatectomy for multifocal HCC. Professor Peng is a family friend having spent some time in Belfast approximately 20 years ago and he has remained in contact with my parents ever since. I had met him on a number of occasions over the past few years at various specialty meetings and was keen to see his department. He has developed a number of novel surgical techniques and has also developed a surgical dissection device which he has patented. It is a hollow diathermy pencil which has an integral sucker. The instrument is manufactured in Hangzhou but is now widely distributed in China. I watched Professor Peng use this instrument to perform the hepatectomy which he did very slickly with minimal blood loss. The second planned liver resection was cancelled because the patient had presented with malignant ascites and therefore we saw a number of patients on the ward including one with severe pancreatitis and two patients with intrahepatic cholelithiasis. I also saw around part of the 800 bed hospital which was very modern with excellent facilities. I was taken out for dinner by Dr Hong De Fei who is one of the attending doctors and one of his trainees. We discussed many aspects of life in China but during much of the time, these doctors told me of the significant reputation of Professor Peng in China. He is regarded as the foremost HPB surgeon in this massive country and patients travel from all over the

country to see him. Furthermore, Professor Peng is frequently invited to different regions of the country to perform surgery, with some centres lining up 3 or 4 major operations a day for him. Many surgeons also travel to see him operate or to be trained by him. He has trained surgeons from 30 of the 35 regional provinces in China. It was clear that Professor Peng is held in extremely high regard by his peers and it is for this reason that he was awarded an honorary fellowship of the American College of Surgeons this year (the first surgeon ever from mainland China to receive such an award). After dinner we travelled to a Tea Bar and enjoyed some local tea.

10 December

I started the day by giving a lecture entitled "Improving outcome in patients with periampullary cancer". Professor Peng then showed a video of a segment 1 resection. We then went to theatre and Professor Peng undertook a planned segment 1 resection for a large haemangioma. This proved to be a very difficult case and was associated with a moderate blood loss necessitating a right hemihepatectomy. I met a number of other surgeons during the day in theatre and was shown a further video on a laparoscopic distal pancreatectomy. The hospital has a big interest in laparoscopic surgery and performs approximately 3000 lap choles per year in addition to the more advanced procedures. In the evening I went for dinner with Professor Mou and a number of other consultants including the superintendant of the hospital. We discussed many of the conparison and differences between health care in China and the UK.

11 December

Although a Saturday, Professor Peng had lined up a planned Whipples pancreaticoduodenectomy to demonstrate his technique of banding jejunostomy. Unfortunately the case involving a young 37 year old lady was unresectable and therefore a bypass procedure was performed. Professor Cai, another senior colleague of Professor Peng then showed me a video of a selection of laparoscopic liver resections. He has done 52 procedures with only 2 requiring conversion. I then went out with Professor and Mrs Peng for lunch followed by a drive through the region visiting the local tea farms. We bought some green tea and enjoyed the beautiful scenery. In the evening I was entertained by Professor Cai who is also Vice President of the Sir Run Run Shaw Hospital at a very exclusive restaurant overlooking West Lake. This was a memorable end to a most enjoyable stay in China. The warmth and generosity of my hosts was truly exceptional.

12 / 13 December

I took a flight from Hangzhou back to Hong Kong and enjoyed a free day exploring and experiencing the culture of Hong Kong and doing some shopping for my family.

14 – 16 December

The Surgical Department at Queen Mary Hospital were hosting the 4th International Meeting on Hepatocellular Carcinoma : Eastern and Western Experiences and it was a real privilege to be invited onto the faculty of this congress.

The meeting was superbly organised and had a fantastic educational and scientific programme. I contributed as chairman of a session and participated in a number of discussions and debates. The faculty dinner was a culinary delight and the congress dinner on board a cruise ship in Hong Kong harbour provided a wonderful end to my three week trip. Immediately after the conclusion of the congress, I headed to Hong Kong International airport and caught my flight home, eventually arriving in Edinburgh on 17 December to enjoy Christmas with my family.

Prof ST Fan, Prof Peng and myself during the Hong Kong Conference

CONCLUSION

I am extremely grateful to the James IV Association for giving me this unique opportunity to visit several truly outstanding units in three different continents. I believe I have had the opportunity to interact with some of the most outstanding hepatobiliary and pancreatic surgeons in the world and I will forever admire their commitment, expertise and dedication. They have inspired me to continue to develop my own specialist practice and to strive towards clinical and academic excellence. My travels also gave me the opportunity to observe and learn about surgical training and service delivery in three very diverse cultures. I am extremely grateful for the most generous hospitality I experienced at every place I visited. I have made friendships across the globe which I trust will be continued throughout the rest of my working practice. This has been the ultimate highlight of my surgical journey to date and I am indebted.