

GEORGE EDWARD FOSTER M.D. F.R.C.S.

CURRICULUM VITAE WITH PARTICULAR EMPHASIS ON TEACHING, CLINICAL AND OPERATIVE SKILLS

Qualifications:

M.B., C.H.B., University of Liverpool 1968
Primary F.R.C.S. 1970
F.R.C.S. England 1974
M.D. Liverpool 1973

Major posts held in training, teaching and as a consultant:

Demonstrator and Lecturer in Anatomy University of Liverpool 1969 – 1972

I obtained this post after my house jobs. It enabled me to acquire and consolidate a knowledge of anatomy to a greater level than the average trainee and I believe that this has made me a much more confident operative surgeon over the years. As a Demonstrator in Anatomy I conducted regular tutorials and began to gain an in depth knowledge of anatomy. This enabled me to pass the primary FRCS at my first attempt in 1970. Following this I continued in the Department of Anatomy for a further two years firstly as a Senior Demonstrator and finally as a Lecturer in Anatomy for my final year of three spent in the Department.

I began an M.D. project studying of the Mesencephalic Trigeminal Nucleus. This work was undertaken using specialised anatomical and neurophysiological methods to look in detail at this largely unknown mid brain component of the Trigeminal nuclear complex. We obtained valuable information regarding its anatomy and both its central and peripheral connections.

This work was published in the Journal of Anatomy in 1972 and presented to in 1973 to both the Anatomical Society and the Physiological Society.

I maintained a long term interested in neurobiology ever since this work.

Teaching in Anatomy:

When working in the Anatomy Department I gave regular undergraduate lectures on the abdomen and pelvis. I lectured in detail on the anatomy of the spinal structures and also undertook regular tuition to students for the primary FRCS exam. For these candidates I lectured primarily on the abdomen and pelvis but also gave a full course of lectures on neuroanatomy.

In 1972 having completed my research work and having much enjoyed my teaching responsibilities in anatomy I decided to return to a substantive career in surgery.

Surgical training:

1972-1974 Surgical Registrar at Liverpool Royal Infirmary.
Surgical Registrar Alder Hey Children's Hospital.

I obtained the final FRCS (Eng) in 1974 at the first attempt.

1974-1976 Middle Grade Post FRCS Registrar. Chester Royal Infirmary.

These posts gave a Registrar one to one surgical teaching for two years. They were widely regarded at the time but unfortunately no longer exist these days. I was fortunate to work with one of the master surgeons of the region (Mr Eric Hardy) who had a specialist interest in gastrointestinal surgery and urology. I was intensively taught clinical surgery throughout this the duration of this post, which had a 1/3 on-call commitment. After one to one operative teaching I was left to solo operate in one of twin theatres. My teacher was always present in the other theatre and was always available instantly for assistance if required. I have often regretted that surgical training does not work like this these days.

My surgical experience included the following:

Over 150 open cholecystectomy operations. These included transduodenal explorations of the common bile duct and sphincteroplasty procedures. These were a particular interest of Mr Hardy's.

Gastric surgery. These included resections; both Billroth 1 and Billroth 2. Vagotomy and drainage operations included selective and highly selective vagotomy.

Intestinal resections included surgery on the right and left colon both elective and emergency.

Hiatal hernia surgery. These were another interest of Mr Hardy's. With his teaching I carried out abdominal and thoracoabdominal Leigh Collis hiatal hernia repairs and Belsey procedures. I also did a number of Nissen Funduplications.

I commenced a training in thyroid surgery and have continued this specialist interest throughout my career.

I commenced training in breast surgery, which I continued until the mid 1990's.

There was a 1/3 on-call requirement in this post. It was backed up with full consultant support with my supervisor being on call when I was. We carried out a full range of procedures including abdominal explorations after trauma, splenectomy, packing of liver injuries, intestinal resections and treatment of bladder

and renal injuries. With Alder Hey Hospital some distance from Chester we carried out regular emergency paediatric surgery referring only very major injuries into Liverpool.

My colon surgery included assisting with the bottom end of abdominoperineal resections.

Urology was part of our surgical commitment in Chester and I carried out many endoscopies. Towards the end of my attachment I was entrusted with a small number of solo nephrectomies, nephroureterectomies and pyelolithotomies.

We carried out basic general paediatric surgery in Chester up to and including pyloromyotomy procedures on neonates.

I was fortunate in this job to receive a fantastic surgical training which gave me a confidence that is all too difficult to obtain today.

1976-1983. I became Lecturer in Surgery at the University of Nottingham (Professor J D Hardcastle) in July 1976.

This was a substantive lecturer post and I remained in the Nottingham for almost eight years. In addition to working at the University Department itself I rotated for three years through the hospital general surgical departments gaining experience in all specialties apart from vascular surgery. Excellent teaching and supervision was available at all times but after about two years I mainly operated solo. In parallel I carried out a considerable amount of research work involving myself with the department's major interest which was gastrointestinal motility. We did major innovative work on ambulatory motility studies using implanted electrodes and strain gauges placed on the small intestine and colon of the dog and pig. We developed techniques of radio telemetry study of the animals. As this work proceeded and using non invasive catheter transducers and radio telemetry capsules we began to study the human gastrointestinal tract obtaining ambulatory pressure recordings from the stomach and proximal small intestine to examine motility patterns in both health and disease. With the arrival of a pH recording radiotelemetry capsule this work was extended to study oesophageal reflux in the ambulatory patient. This latter work became well known and confirmed that in many cases patients with reflux proven on ambulatory ph studies presented in fact with many and various atypical symptoms and often endoscopic oesophagitis was not a feature. This interest in oesophageal reflux led to the department being referred a significant number of patients with reflux disease.

I did virtually all this hiatal hernia surgery routinely performing open Nissen funduplications in the majority of patients. We also did a project studying an implanted anti reflux device. Because of our special interest in physiological studies all of these patients were studied preoperatively and postoperatively on an ambulatory basis. It was, as a result of this work, that I realised the importance of

detailed physiological studies before committing patients to operative antireflux procedures

The department's other interests in gastrointestinal surgery led me to perform gastric resections, highly selective vagotomies (in some cases in association with fundoplication procedures), hepatobiliary and colorectal surgery. In the latter field the department piloted the use of annular stapling devices for low colorectal anastomoses.

In 1979 I spent six months at the Mayo Clinic (Dr Keith Kelly) contributing to an ongoing research program of gastrointestinal motility work in both animal and human subjects. I assisted at all manner of operations including anti-reflux surgery.

During my time in Nottingham I contributed to over thirty peer reviewed papers and forty personal presentations at both national and international meetings. I also contributed to two book chapters.

In addition to this I undertook a full program of undergraduate teaching and examining in this innovative medical school.

1983 to 2011. In 1983, on the retirement of Mr Hardy my previous teacher, I was appointed Consultant Surgeon to the Chester Hospitals. I settled down as a General Surgeon in Chester for nearly thirty years. I ran a very busy surgical practice in a Hospital with students from two medical schools. Building on my Nottingham interests and having obtained the necessary equipment I began to carry out pH and motility studies on gastro-oesophageal reflux patients. This allowed me to study all patients before performing antireflux procedures. With the coming of PPI drugs and efficient prokinetics I was selective regarding choosing suitable patients for surgery and liaised closely with my gastroenterology colleagues. As well as surgery on sliding hernias I did a small number of large size hernias where the whole stomach had herniated into the chest. I recall performing thoracoabdominal procedures on a number of these.

For over ten years my surgical practice also included urology and breast surgery. Until my retirement I did a regular monthly paediatric surgical list performing all manner of general paediatric procedures and in the early years operations on much younger children including pyloromyotomy. Following NCEPOD recommendations it was decided in the early 1990's to refer children under two on to Alder Hey.

From 1998 onwards, in line with Calman Hine recommendations I began to concentrate more and more on colorectal surgery (however I continued my paediatric and thyroid interests). From 1999 to 2005 I was Chairman of the Mersey Colorectal Surgeons and chaired its Clinical Network Group. I was lead cancer surgeon in my hospital from 1996 to 2004. I was one of the very early Council members of the Association of Coloproctology in Great Britain and Ireland and as a member of the Council from 1996 to 2010 I remain its longest serving member to date.

Throughout my surgical career I have constantly audited my clinical results and taken care to compare the results of the surgery in my unit to national figures.

I have reported our results both nationally and internationally and from the point of view of performance indicators for colorectal surgery exceeded all reported national targets by a significant margin.

In 2008 a study identified Chester as achieving the second best results in the UK for the treatment of Colorectal Cancer in a District General Hospital.

Throughout my time as a consultant I remained on call for emergency surgery initially on a rota of 1 in 3 and in the latter few years 1/6. I did my last weekend on call four days before my retirement in July 2011 when I carried out 2 splenectomies..

A synopsis of major operations performed over 25 years:

All forms of gastric resections both partial and total. 1983 -2000.

Emergency gastric surgery between 2000 to 2011 for bleeding and trauma.

Oesophageal cancer surgery 1983 – 2000:

These included left thoracoabdominal oesophagogastrrectomy procedures, Ivor Lewis right thoracotomy resections and a small number of three stage resections with a cervical anastomosis between the oesophagus and stomach being performed in the neck. My immediate postoperative results were good with a leak rate of less than 5% but recurrence of the disease was common; because this a universal event considerably less primary oesophageal resections are performed these days

In conjunctions with my ENT colleagues I did a number of trans-hiatal gastric mobilisations as part of the reconstruction following pharyngolaryngectomy. All these proceeded uneventfully with good long term results.

Hepatobiliary surgery

Up to 1990 I did over 1,500 open cholecystectomies including exploration of the common bile duct and sphincteroplasty procedures. I did a number of Roux en Y biliary enteric bypass operations for inoperable carcinomas of the lower end of the bile duct and pancreas.

With the coming of laparoscopic cholecystectomy in 1990 I continued with this procedure performing at least 1,000 laparoscopic procedures including exploration of the common bile duct. There were no bile duct injuries in this series whatsoever.

With my interest in gastro-oesophageal reflux I continued with anti-reflux surgery from 1983 to 2000. Almost all of these were Nissen Fundoplication operations with

a small number of procedures on complex hiatus hernias with intra-thoracic stomachs.

Throughout the 1990's I attended courses on laparoscopic surgery both for biliary tract surgery, hernia surgery and later laparoscopic anti-reflux surgery. However from the point of view of the latter the numbers I achieved in practice were low as I found in the later 1990's, with advances in medical therapies, there was a fall off of cases requiring anti-reflux surgery.

Colorectal surgery

As I expanded my colorectal practice from 2000 onwards I became responsible for the majority of colorectal operations in Chester performing over 100 resections per annum.

These included all forms of rectal cancer surgery including low anterior resections. We did a small number of laparoscopic left and right resections together with the first few laparoscopic abdominoperineal procedures in the area.

Over a twenty year period our colorectal cancer resection results were constantly audited. We exceeded all performance indicator requirements by a substantial margin and I reported these results both nationally and internationally.

In 1990 I was the first Colorectal Surgeon in the area to develop the ileal pouch anal anastomosis for reconstruction after colectomy for inflammatory bowel disease

Paediatric surgery:

I did a monthly elective paediatric surgical list throughout my career. With my specialist interest in paediatric surgery I was also on call out of hours when my colleagues encountered problems with children.

Endocrine surgery

Throughout my career as a consultant I did up to 40 thyroid procedures a year partial and total for Grave's disease and cancers and lobectomies for unilateral adenomas. All were audited

Urology

Until 1996 I had a large urology practice performing up to 150 TURP's per year. Other operations included bladder and kidney resections. Cystectomies included the construction of ileal-loop urostomies, I found my gastrointestinal experience very helpful here and achieved good results. I performed a number of radical nephrectomy operations for cancer.

Breast Surgery

Up to 1996 I had a full practice of breast surgery performing all forms of mastectomy and partial mastectomy procedures.

In the latter half of the 1990's breast cancer devolved to a specialist division.

Emergency work

My experience as an emergency general surgeon included all forms of emergencies except vascular which were referred into a specialist centre or internally to the vascular surgical service.

Endoscopy

Throughout my career I have performed all forms of gastrointestinal endoscopy procedures with the exception of ERCP work.

Endoscopy work has included laser treatment of oesophageal tumours, laser treatment of gastric tumours, oesophageal dilatation procedures and many colonic polypectomy operations including the removal of complex submucosal polyps.

Surgical Teaching

I have always enjoyed teaching operative surgery to our trainees; it was very rewarding to see their skills and confidence develop. In Mersey our trainee surgeons could bid for their preferred jobs. For over 25 years Chester was in the front ranking and our posts were highly sought after.

Major professional, administrative and management positions held during my career

1974 – 1976: Mess President Chester Royal Infirmary
Junior doctors representative on District Medical Committee

1976 – 1980: Member of Council Association of Surgeons in Training

1981: President of Association of Surgeons in Training

1983 – 1986: Member of Manpower Advisory Panel, Royal College of Surgeons of England

1990 – 1996: Clinical Director of Surgery Countess of Chester Hospital

1990 – 1996: Member of Management Board Countess of Chester Hospital

- 1996 – 2001:** Royal College of Surgeons Tutor Countess of Chester Hospital
- 1996 – 2010:** Member of Council Association of Coloproctology of Great Britain and Ireland (longest serving member on the Council)
- 2000 – 2008:** Chairman Independent Healthcare Committee; Association of Coloproctology of Great Britain and Ireland
- 1998 – 2004:** Foundation Chair Mersey Colorectal Cancer Network
- 1998 – 2006:** Lead Clinician for Cancer Services Countess of Chester Hospital
- 1985 – 2000:** Examiner in Surgery for Universities of Liverpool and Manchester
- 2004 – 2010:** Chairman of Medical Staff Committee Countess of Chester Hospital
Member of Management Board Countess of Chester Hospital
- 1996 – 2008:** Trustee, Secretary/Treasurer, Bowel Disease Research Foundation of Great Britain and Ireland
- 2008 – present:** Honorary Treasurer Bowel Disease Research Foundation (in excess of £1.5 million raised since 2005 for research into all forms of bowel disease.
- 2008:** President of the Chester and North Wales Medical Society
- 2009 :** President of the Liverpool and North West Society of Surgeons
- 2000 –present:** Member, Nuffield Hospitals Board

Major publications:

The following are a selection of my major publications over the years

1. Foster GE, Bowsher D (1973). A study of the Mesencephalic Trigeminal Nucleus in the Rat. *J. Anat*; 114, 293-295.
2. Foster GE, Evans DF, Arden-Jones JR, Beattie A and Hardcastle JD (1984): Abnormal gastrointestinal motility in diabetes and after vagotomy, In; *Gastrointestinal Motility*, ed: Roman C, pp:305-310, Lancaster MTP press (*Book Chapter*).
3. Evans DF, Foster GE and Hardcastle JD (1982):The Motility of the Human Antrum during the day and during sleep, An investigation using telemetry. In: *Motility of the Gastrointestinal Tract*, ed: Weinbeck M. New York. Raven Press, 185- 192. (*Book Chapter*)

4. Healy TE, Foster GE, Evans DF and Syed A. (1981). Effect of IV anaesthetic agents on canine GI motility. *Brit. J. Anaesth*:53(3), 229-233.
5. Foster GE, Arden-Jones JR, Evans DF, Beattie A and Hardcastle JD (1982): Abnormal jejunal motility in gastrointestinal disease, the Q complex. In; *Motility of the Digestive Tract*, Weinbeck M ed: New York, Raven Press. 427-432. (*Book Chapter*)
6. Maxwell- Armstrong GA, Steele RJ, Amar SS, Evans D, Morris DL, Foster GE and Hardcastle JD (1997): Long term results of the Angelchik prosthesis for gastroesophageal reflux. *Brit J. Surg*:84(6), 862-864.
7. Jones H, Foster GE and de Cossart L (1999): Colorectal Surgery, does POSSUM predict outcome. *Dis. Col/ Rectum*, 42: 18-20.
8. Slater E, Evans DF, Foster GE and Hardcastle JD (1982): A portable radiotelemetry system for ambulatory monitoring. *J Biomed. Eng*, 4(3), 292-295.
- 10, Stower MJ, Foster GE and Hardcastle JD (1982)
A trial of glucagon in the treatment of painful biliary tract disease, *Brit. J. Surg.* 69: 591-593.
11. Reynolds JR, Graham TR, Foster GE, Bourke JB and Hardcastle JD (1985). Piperacillin in Colorectal Surgery, *J. Hosp. Infection*; (12). 191-192.
- !2, Evans DF, Foster GE, Hardcastle JD, Johnson F and Wright JW (1982): The action of porcine glucagon on the motility of the canine duodenum and Jejunum. *Brit J Pharmacol*: 76(2); 245-252.
13. Foster GE, Vellacott KD, Balfour TW and Hardcastle JD . (1981)
Outpatient flexible sigmoidoscopy, diagnostic yield and the value of Glucagon. *Brit. J. Surg*; 66: 463-464.
14. Foster GE, Bourke JB, Doran J, Balfour TW, Holliday A, Hardcastle JD and Marshall DJ. (1981).
Clinical and Economic consequences of wound sepsis after Appendicectomy And their modification by metronidazole or povidone iodine. *Lancet* 317: 769-771.
15. Foster GE, Evans DF and Hardcastle JD (1978)
Heart rates of surgeons during operating and other clinical activities and Their modification by oxprenolol. *Lancet* 1(8076): 1323-1325.
16. Foster GE, Makin C, Evans DF and Hardcastle JD (1980)

Does beta blockade effect surgical performance, a double blind trial of
Osprenolol. Brit. J. Surg; 67(9): 608-612.

- 17, Evans DF, Foster GE, Hardcastle JD, Johnson F, Wright JW and Bennett T.
(1978)
The effect of Glucagon on the canine duodenum and jejunum.
Brit J Pharm. 64 (3) 301-302.
18. Foster GE and Bourke JB (1978)
Acetabular cement causing intestinal obstruction.
Lancet. 2(8083); 267.
19. Foster GE, Hardy EG and Hardcastle JD (1977).
Subcuticular suturing after Appendicectomy,
Lancet. 1(8022): 1028-1029.
20. Foster GE. (1975);
Polyglycolic acid sutures and hypertrophic scars,
Lancet 1(7918); 1128-1129.
21. Martin L and Foster GE (1996):
Parastomal Hernia.
Ann, R, Coll Surg. Eng. 79(2):154-155.

The Chester Department of General and Colorectal Surgery regularly submitted abstracts for presentation at national and international meetings. Unfortunately my database of these is incomplete. The following are a selection:

1. The cross stapled anastomosis: is it reliable
RSM section of Coloproctology, Vienna 1991.
2. The Hartmann procedure, safe of not so safe.
RSM section of Coloproctology, Madrid 1992.
3. Temporary stomas; the reality for the patient.
ACPGBI Glasgow 1993.
4. Parastomal hernia, adding insult to injury.
ACPGBI London 1994
5. The Endoscopic Transanal resection; a need for urological expertise and frequent follow up.
ACPGBI Edinburgh 1997
6. Emergency surgery for Colorectal cancer in a district Hospital:
Specialist teams and favourable outcomes.
ACPGBI Edinburgh 1997.

- 7 Does the specialist preserve more sphincters.
ACPGBI Edinburgh 1997.
8. Nurse led Endoscopy; here to stay.
ACPGBI Jersey 1998,
- 9, Specialist Nurse led Flexible Sigmoidoscopy, safe economic and efficient
Tripartite Coloproctology Meeting, Washington DC 1999.
10. POSSUM and outcomes after Colorectal surgery
Tripartite Meeting, Washington DC 1999.
11. A three year prospective audit of colorectal cancer in a DGH
ACPGBI Southport 1999.
12. Day Case Haemorrhoidectomy; a sting in the tail.
ACPGBI Southport 1999.
13. Rectal Cancer surgery and gender.
Tripartite Meeting, Melbourne 2002
14. The chemical sphincterotomy
Tripartite Meeting, Melbourne 2002.

Other Interests;

I held a Private Pilots Licence for over 25 years and had both multiengine and instrument ratings.

I have a continuing interest in comparing the instruction and assessment of pilots and surgeons and have given many talks on this subject to both medical and aviation audiences.

I am a keen skier.