Surgical gastroenterology in India – the evolution of a revolution: a personal perspective

N. Rangabashyam

Dear Surgical Colleagues,

Greetings to one and all,

It is indeed a privilege to pen this guest editorial and address my contemporary surgeons, my junior brethren and the next generation younger surgeons.

At the outset, I would like to thank the editorial board before I embark upon my journey into the world of surgical gastroenterology. For over four decades, I have been a part of this fascinating field and have constantly striven to keep pace with the latest trends and advancement.

Three decades ago, when I thought of the idea of inculcating specialist attention to the field of gastroenterology, my enthusiasm was not totally greeted with encouragement. Perseverance paid in the end and with help from a few dedicated souls, to name a few, Prof. N. Madanagopal, Professor of Gastroenterology and Prof. A. Gajaraj, Director, Barnard Institute of Radiology the first department of surgical gastroenterology in India, more precisely, in Asia, started in 1978 at Ward No.10, Government General Hospital and Madras Medical College, Chennai (Fig. 1). I was fortunate to be at the helm of affairs being appointed the first professor of surgical gastroenterology.

My association with stalwarts such as Prof. A.S. Fenn, CMC, Vellore, Dr. Arthur Desa and Dr. Menda from Bom-

bay and Prof. A.K. Basu of Calcutta, Prof. P.N. Chuttani, Chandigarh, helped me to understand the need of surgical gastroenterology.

Since introduction, we had combined wards with medical and surgical gastroenterology to look after ailments such as GI bleeding, pancreatitis, inflammatory bowel disease. This combined team contributed to choose the line of treatment at appropriate time to undertake surgery or continue medical therapy.

The eighties saw the beginning of a superspecialty course M.Ch in Surgical Gastroenterology the first of its kind in the country. Till date there has been no other country which has coined or termed this specialty as surgical gastroenterology and our country took the initiative.

Three other centres were established in Lucknow (Prof. S. P. Kaushik at Sanjay Gandhi Post Graduate Institute of Medical Sciences), New Delhi (Prof. Samiran Nundy at All India Institute of Medical Sciences) and Mumbai (Prof. S. K. Mathur, KEM Hospital). Subsequently several other centres were established throughout the country. At present, there are eight training centres in the country offering 16 M.Ch seats for training in surgical gastroenterology and 17 centres offering 27 DNB seats in surgical gastroenterology every year.

The first batch of examiners for the M.Ch were (Fig. 2):

1. Prof. N. Rangabashyam, Madras Medical College, Chennai, Convenor.
2. Prof. T. E. Udwadia, Bombay Hospital, Bombay.
3. Prof. B.M.L. Kapoor, All India Institute of Medical Sciences, New Delhi.
4. Prof. Prakash Khandhuri, Christian Medical College and Hospital, Vellore.

The nineties saw the field grow from strength to strength with a rapid foray into the academic arena with two decades of hard work and results in the background. In this period various gadgets were added into the surgical gastroenterology. The armamentarium included fiberoptic endoscopes, staplers and stents which simplified diagnostic and

N. Rangabashyam (✉)

Founder, Prof & Head, SGE, Madras Medical College
Honorary Surgeon to the President of India
Honorary Consultant Armed Force Medical Services
Past President, The Association of Surgeons of India
Past President, The Indian Society of Gastroenterology
Past President, International Hepato-Pancreato Biliary Association
Ramana Surgical Clinic, 38, Venkatanarayana Road,
T Nagar, Chennai - 600 017,
India

E mail: nrangabashyam@yahoo.co.in

Fig. 1 Sir, Jeff Slaney, in Ward No. 10

therapeutic procedures. We started doing laparoscopy with nephroscope and computers had started to make their presence felt. Workshops and public awareness programmes all over the country established surgical gastroenterology as a recognised specialty.

Laparoscopy to access the peritoneal cavity for diagnostic purposes was pioneered by Prof. T. E. Udwardia for several decades and he performed the first laparoscopic cholecystectomy in Mumbai in 1990. Laparoscopy and minimal access surgical techniques gained rapid acceptance to provide basic and advanced laparoscopic procedures in several centres of excellence in the country. Dr. P. Chowbey and Dr. C. Palanivelu are amongst several pioneers in the field who have established centres of excellence that are globally recognised.

Sub-specialities began to emerge as hepato-biliary, colorectal, upper GI tract and laparoscopic surgery. The field of surgical gastroenterology now progressed with endoscopic resections, sphincterotomies stone retrieval, CBD stones, klatskin tumour, and extensive resection for liver malignancy, obstructive jaundice, biliary strictures, re-operative surgeries and other arena where skill and expertise were in demand. Since the introduction, endoscopic sclerotherapy by various methods, shunt procedure became a rarity. Ostomy procedure and training were given to surgeons, nurses and patients. Structured training was offered to cater to individual surgeon's needs.

Towards the dawn of the millennium the field of surgical gastroenterology took rapid strides armed with CUSA, water jet, harmonic scalpel. The progress of surgical gastroenterology in India caused the world to take notice and thus ushered in the era of medical tourism, minimally invasive surgeries and live workshops. National consensus and protocols became the order of the day and faculty from India started touring around the country and the globe. We still need to make progress in relation to small bowel transplant and pancreatic transplant for diabetes.

Fig. 2 First Batch of Examiners for M.Ch (Surgical Gastroenterology – 1987)

The brain death legislation and organ transplantation bill became law in 1995 and the liver transplant programme was introduced in the country. In the face of tremendous adversity in terms of logistics, trained manpower, infrastructure, equipment and instrumentation, the initial liver transplants were attempted at Chennai (Dr. Veena Girinath and Dr. Shanmugam) and New Delhi (Dr. Piyush Sahni). The dire need for liver transplants in the country, availability of dedicated transplant teams, suitably equipped critical care units and institutional and government commitment have ensured that Liver transplant programmes were successfully established in the country. Currently, about 19 centres in the country offer Liver transplants (cadaveric and living).

At this juncture when the field looks promising it would not be appropriate if a few lacunae are not highlighted keeping the interests of the nation and the scope of the field in mind.

- Research to be introduced and also to do PhD
- Ethics has not been inclusive in experimental gains
- Surgical fraternity have begun to get subjugated to industrial diktat
- Structured teaching should be divulged at the institution and tertiary level
- Insurance and consumerism need revised negotiations
- Patents and products, innovations and integration, public private partnership, intellectual rights.

What the surgeon needs:

1. Protocols
2. Customised solutions
3. Supervised guidance
4. Support from senior colleague to overcome learning curve

What the speciality needs:

- Focussed research
- Dedicated centres of excellence
- Sabbaticals for surgeons
- CME accredited workshops

- International faculty,
- Surgical exchange programme
- Transplant surgery to be done by trained and experienced team in recognised centres. this helps pooling of resources

What the nation needs:

- Tumour registry
- Referral centres
- Research funding and grants
- Awards and recognition
- Disease surveillance
- Followup registries

- Online tutorials
- Simulation workshops
- Telepresence surgery

It is indeed very satisfying to see the specialty grow and prosper the way it has in a relatively short time.

“It is a fine thing to have ability, but the ability to discover ability in others is the true test

– Lou Holtz.

**With sincere and personal greetings.
Prof. N. Rangabashyam**