

Advances in general surgery 50 years ago

In 1971, some of the new advances that were set to change the field of general surgery included theories about the development of peptic ulcers, new treatments for varicose veins and pioneering work in the introduction of day case surgery.

Harold Ellis¹

Author details can be found at the end of this article

Correspondence to:
bjhm@markallengroup.com

Fifty years ago in 1971, before the era of the laptop and Google, general practitioners could rely on a whole library of excellent medical periodicals to keep them up to date with progress in medicine. These publications included, among others, 'the British Journal of Clinical Practice', 'Update', 'London Doctor', 'The Postgraduate Medical Journal' and 'The Practitioner'. The editor of the latter asked me to prepare a 'Review of advances in surgery' to be published in the October 1971 edition. What were the items of surgical news that caught my eye for inclusion in that issue?

Peptic ulcers

Endemic throughout the Western world 50 years ago was peptic ulceration, which was especially common in young men. The aetiology of both gastric and duodenal ulcers was the subject of much debate, although the common factor seemed to be the presence of hydrochloric acid in the gastric juice. This was also responsible for reflux oesophagitis and the well-known occurrence of anastomotic ulceration at the site of a gastro-jejunostomy.

Lester Dragstedt, Professor of Surgery in Chicago and the father of vagotomy in the treatment of duodenal ulceration, considered that stasis of the gastric antrum, by producing an over-secretion of gastrin, resulted in an over-secretion of gastric juice and hence gastric ulceration. It is true that gross pyloric stenosis may be complicated by the development of a gastric ulcer, and this can be reproduced in experimental animals. However, the majority of patients with gastric ulceration showed no evidence of delay in gastric emptying, and there was little to support this theory.

Sonny Du Plessis, Professor of Surgery at the University of Johannesburg, supported an alternative theory of duodenal juice reflux across an abnormal pylorus. He suggested that this produces atrophic gastritis, alters gastric mucus and allows acid and pepsin to produce ulceration of the damaged mucosa.

These rather strained theories were, of course, destroyed by the work of Barry Marshall and Robin Warren, of Perth, Australia, who gained the Nobel Prize in Medicine in 2005 for demonstrating the role of the organism *Helicobacter pylori* in producing proteases that damage the gastric and proximal duodenal mucosa. Rapid relief of symptoms and healing of the ulcer on endoscopic examination followed a course of antibiotics.

Varicose veins

Varicose veins and their complications present a common surgical problem. They are cosmetically ugly and they may result in the complications of thrombosis, skin pigmentation, varicose ulceration. Although it is rare now, in 1971 there was the possibility of the complication of malignant change (Marjolin's ulcer) and haemorrhage following quite minor trauma. Quite extensive surgery may be required, although sclerotherapy – the injection of sclerosing fluid to thrombose the dilated vein – was used for lesser degrees of the disease.

Fifty years ago there was considerable interest in the injection treatment pioneered by George Fegan at the Sir Patrick Dunn's Hospital, Dublin. This involved marking out the sites of the perforating veins on the skin of the leg with the patient standing, then injecting sclerosing fluid into these sites with the leg elevated and the varix emptied. The elevated

How to cite this article:

Ellis H. Advances in general surgery 50 years ago. Br J Hosp Med. 2021. <https://doi.org/10.12968/hmed.2020.0726>

leg was then carefully bandaged with an adhesive elastic bandage, which was kept on for 6 weeks. This allowed healing of the empty varix by fibrosis.

Encouraged by a visit to see Fegan at work in 1966, I adopted his technique at my own varicose vein clinic at Westminster Hospital. My colleagues and I, as well as the patients, were satisfied by the results. With time, further varices may develop and it may be difficult to distinguish between recurrence of the varix or development of a new varix. It is then much easier to persuade the patient to have a further injection rather than a second operation. Fegan's technique was also found to be effective in the treatment of venous ulceration of the leg in the presence of incompetent perforating veins.

Day case surgery

Perhaps encouraged by the success of the varicose vein and venous ulcer clinics that were a feature of most general hospitals in the country, 50 years ago there was an increasing interest in other conditions that could be managed on a day case basis. Until then, patients requiring even quite minor surgery, especially if this required a general anaesthetic, would be admitted at the very least for an overnight stay before and after the operation. It was unusual in my experience of this time for a patient to be sent home with sutures still in the operative wound. However, things were starting to change.

The great pioneer of day case surgery in this country 50 years ago was Peter Lord, surgeon at High Wycombe hospital, who published extensively on this subject. In 1970, he reported excellent results in his treatment of pilonidal sinus. At that time this common lesion was treated surgically by the extensive excision of an ellipse of skin, together with the underlying fat, containing the ramifications of the sinus tracks. The large wound was packed open with vaseline gauze, which was replaced daily. This was a rather messy and painful procedure, which might take several weeks to heal enough for the patient to leave hospital.

Lord's simple technique comprised excising a tiny circle of skin around the mid-line orifice of each of the individual sinuses, which were cleaned out of granulation tissue and implanted hairs by means of a small nylon brush or a pipe cleaner. The further dressings were then continued as an outpatient and rapid healing followed.

Lord went on to develop outpatient techniques to deal with other surgical problems, including hydrocele, epididymal cysts and haemorrhoids which, again, became widely adopted. Hydroceles were opened and the sac obliterated from within by a series of absorbable sutures. Cysts of the epididymis were dealt with by finding the avascular plane between the cyst wall and the scrotal tissue, enabling it to be excised through a small incision. Third degree (prolapsed) haemorrhoids were dealt with by vigorous digital anal dilatation under a general anaesthetic. This proved to be so popular that Lord took rooms in Harley Street 1 day a week to deal with an influx of private patients!

In 1968, Lord reported dealing with 1355 surgical day cases in the previous year. These included 200 cystoscopies, 164 anal dilatations for haemorrhoids, 34 procedures for pilonidal sinus and 43 hydrocele operations. Lord received a well-deserved Order of the British Empire for his services to surgery.

The first laparoscopic cholecystectomy was performed in 1985 by Eric Muhe in Germany. Who would have imagined 50 years ago that this operation today would usually be carried out as a day case or single night stay procedure?

Author details

¹c/o British Journal of Hospital Medicine, London, UK