

The European Way: The History of Stomach Cancer Surgery

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Stomach cancer is not a new condition – history tells us that it was first described by Hippocrates, the father of medicine, in Ancient Greece, although he didn't appear to understand much about it, how it developed or how to treat it. It wasn't until much later, in 1835, that stomach cancer began to be understood, when a French anatomist named Jean Cruveihier described cancerous stomach ulcers. This was merely the first step in the history of stomach cancer – it would be some time until the first attempts at treating the condition showed promise.

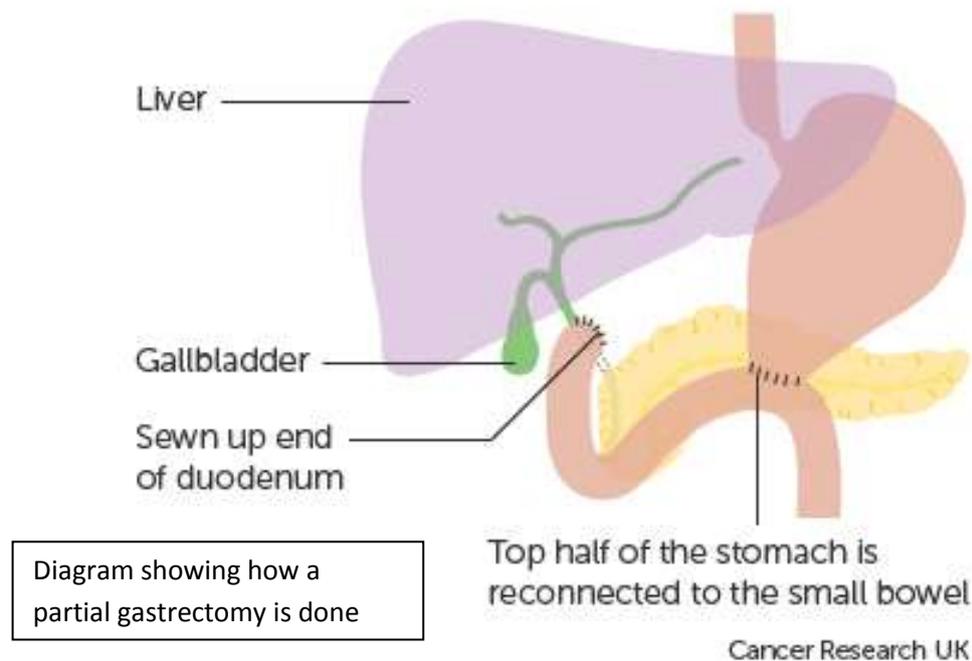
First Steps: Jules Emile-Pean and Ludwig von Rydygier

The official starting point in the history of stomach cancer surgery is the 9th of April 1879, almost 50 years after the condition was first described. Incidentally, it was another Frenchman who was involved in this milestone. Jules Emile-Pean was a



Jules Emile-Pean

French surgeon, and he performed the first ever operation in which part of the stomach was removed (a partial gastrectomy) to help treat someone with stomach cancer. The operation involved removing the portion of the stomach that contained the cancer, and joining the remaining part of the stomach to the top part of the small bowel (jejunum). Unfortunately, the patient did not survive beyond a few days following the operation, rendering this first attempt unsuccessful.



Our story continues a year later with Ludwig von Rydygier, a Polish surgeon from Krakow. Born in 1850, Rydygier is regarded as one of the greatest contributors to modern surgical practice, working across several different fields and leaving his mark on each one. On the 16th of November, 1880, he became the second surgeon to perform a partial gastrectomy for stomach cancer (which was also one of his first

operations on a person – much of his previous work had been carried out on animals). Unfortunately, his patient, a 64 year old gentleman name Julian



Mickolajewicz, died shortly after the operation. However, Rydygier published two detailed descriptions of his work in medical journals, and provided other budding surgeons with an insight into this revolutionary treatment option for stomach cancer, paving the way for the development of a potentially curative surgical treatment.

First Taste of Success: Theodor Billroth

We now arrive in Vienna on the 22nd of January 1881, and pick up our story at the operating table of Theodor Billroth. Billroth was a Prussian-born surgeon working in Berlin, and is widely regarded as the founding father of stomach surgery, due to his immense skill as a surgeon. His patient was 43 year old Therese Heller, who had a

stomach cancer that was blocking the junction between her stomach and small bowel. The operation that she needed to remove it (which had been previously attempted by both Emile-Pean and Rydygier) was considered to be one of the most technically difficult operations of the time. Four weeks later, Therese was discharged home from the hospital following a successful operation, but unfortunately she



Theodor Billroth

passed away four months later as her cancer had spread to her liver. The operation was a triumph for Billroth, causing a great deal of sensation and attracted a lot of attention from both the public and the medical world. The technique used by Billroth to carry out the operation is still used today, with some modification, and this case cemented his position as one of the leading surgeons of his time.

Expanding the Horizons: Karl Schlatter

Following Billroth's success, our story now takes us to Zurich, where we meet the Swiss surgeon Karl Schlatter, who, in 1897, became the first person to remove the whole stomach as a treatment for cancer (a total gastrectomy). This operation

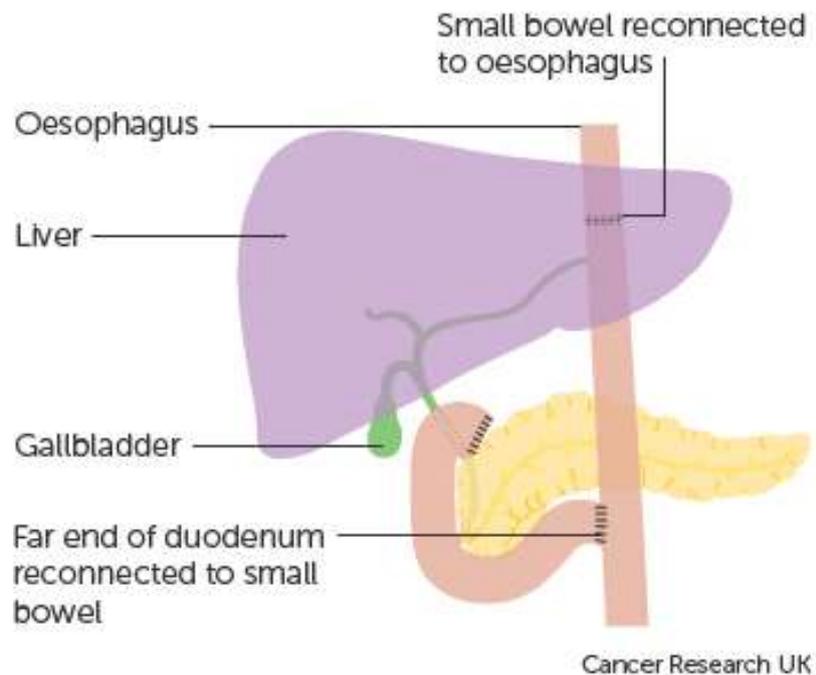


Diagram showing how a total gastrectomy is done

involves joining the bottom part of the gullet (oesophagus) to the top portion of the small intestine (jejunum). His patient, Anna Zandis, survived for over a year after the operation, but sadly passed away from recurrence of her cancer 14 months later.

The operation was still considered a triumph for Schlatter, and news of his success soon spread across the Atlantic: soon, the procedure was being performed by some of the biggest American surgeons of the time. The young Schlatter, through this success, changed the management of stomach cancer: his method became

regarded as the definitive surgical treatment for all stomach cancers, and a similar technique is still used today in modern operating theatres.

The Modern Era

Currently in the UK, around 7,000 people are diagnosed with stomach cancer each year. The commonest type is adenocarcinoma of the stomach, but there are other types that may occur. Medicine and surgery has advanced a great deal since our story began in 1879 with Jules Emile-Pean, and the treatment of stomach cancer has evolved along with it: not only are there different operations that can be done, but chemotherapy and radiotherapy can also be used, be that alone or in combination with an operation. World-wide, the practice does vary, but the commonest treatment for stomach cancer is a combination of either chemo- or radiotherapy along with an operation to remove all or part of the stomach.

In recent years, medicine had taken on a much more holistic approach to treatment, meaning that patient care is much more rounded, and factors other than the initial problem, such as removing the stomach cancer, are taken into consideration. Having all or part of the stomach removed is a big operation, and requires certain adjustments to lifestyle after having and recovering from the surgery.

With any type of surgery to remove stomach cancer, changes will have to be made to the diet. Patients often find that they cannot manage the same portion sizes that they used to eat, and it can take a long time for your stomach to stretch so that larger meals can be managed. It is widely advised that the best approach to eating again is

to follow the “little and often” pattern to begin with, and gradually increase the portion size and decrease the frequency of meals as recovery proceeds.

Conclusion

The history of stomach cancer surgery is relatively short, but the story has certainly not reached its end. Looking back over the successes and failures of some of the greatest surgeons of the 19th and 20th centuries, we can see that the treatment has come a long way since Jules Emile-Pean’s first attempt at removing part of the stomach in 1879. With the advancement of medicine, not only in terms of drugs, but also in terms of the tools that are used, it seems certain that in another 50 years, the treatment of stomach cancer will have further advanced again. Although the underlying techniques remain the same, the way the procedures are carried out are very different to what they were 140 years ago – the operating theatres and equipment are much more sophisticated, and some patients even have their stomach removed by key-hole surgery – a technique Billroth and Rydygier certainly would not have been practicing in their day.

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