Pfannenstiel incision: ‘a long horizontal abdominal incision made below the line of the pubic hair and above the mons veneris down to and through the sheath of the rectus abdominus muscles but not the muscles themselves which are separated in the direction of their fibers.’
The Pfannenstiel incision is today one of the most commonly used laparotomy techniques worldwide. Historically the Pfannenstiel incision has been used by all surgical specialties including general surgeons and urologists to perform a wide range of surgical procedures including prostatectomies, appendectomies and inguinal hernia repairs. The Pfannenstiel incision is the most widely used skin incision in obstetrics and gynaecology in the developed world and by far the most common incision used at caesarean section which accounts for a large majority of operations undertaken in women of childbearing age. In 2010-2011 there were 162,512 caesarean sections undertaken in England predominantly through a Pfannenstiel incision.

This laparotomy technique is unusual in that there is no other terminology for this incision as there is with other surgical incisions, for example the Kocher incision is also know as a subcostal incision. This is reflected globally with this specific laparotomy technique being referred to as a Pfannenstiel incision in countries as wide ranging as America, France and Russia.

The Pfannenstiel incision was first described in 1900 by Hermann Johannes Pfannenstiel (1862-1909) in a paper describing 51 cases. This novel incision was first attempted by Pfannenstiel as an alternative to the traditional laparotomy, which had a high rate of future complications in particular difficulties during delivery due to vaginal scar formation. By using this innovative laparotomy
technique Pfannenstiel aimed to reduce the rate of incisional hernias and provide a cosmetically improved result.

Hermann Johannes Pfannenstiel was born in Berlin on 28th June 1862, the son of a royal judge. Against his father's wishes Pfannenstiel studied medicine in Berlin from 1880 and despite being deprived of financial support completed his studies and thesis in 1885.

In 1885 he subsequently started work as an assistant physician in Posen where he worked for two years. In 1887 he moved to Breslau where he trained under the senior professor Heinrich Fritsch (1844-1915), a well known gynaecologist of the time, working as an associate physician. It was during this period of training in Breslau that Pfannenstiel qualified as an obstetrician and gynaecologist and began to develop his innovative laparotomy technique. In 1896 he was made an associate professor and by 1900 Pfannenstiel had used his new laparotomy technique on 51 women with a variety of gynaecological conditions. In his original paper published in 1900 Pfannenstiel describes his incision in great detail depicting the technique schematically (figure 1).

In 1902 Pfannenstiel was made chairman of the department of obstetrics and gynaecology at the University of Gissen where he remained for five years. In 1907 he became a professor at the university of Kiel and head of the department of gynaecology. In 1907 Pfannenstiel was made an honoury member of the American Gynecological Society. He rejected three further offers to work at
departments in Leyden, Erlangen and Freiburg.

Pfannenstiel was not only recognized as a physician and surgeon but also as a teacher. He was the secretary of the German Society for Gynaecology from 1891 and published a wide range of written work on the pathology of the ovaries, tumours of the uterus and the formation of carcinomas after oophrectomy. Following advice from Pfannenstiel the Northwest German Society for Gynaecology and Obstetrics was founded in 1909 just weeks before he died.

In 1889 Hermann Pfannenstiel married Elizabeth Behlendorff and their only son Wilhelm Hermann Pfannenstiel was born in 1890. Wilhelm also went on to become a physician as well as a member of the Nazi party, a professor of Hygiene at the University of Marburg and headed the German Society for Race Hygiene.

Ironically Pfannenstiel died at the age of 47 of sepsis resulting from an injury to his finger during an operation undertaken via a Pfannenstiel incision for a tubo-ovarian abscess. To recognize his achievements as a physician a medal, foundation and award have all subsequently been dedicated to Pfannenstiel.
Figure 1: Illustration from Pfannenstiels original article (1900) depicting the technique for skin incision.