

Marion Sims: father figure of vesico-vaginal fistula surgery

Over the centuries, a dreadful complication of prolonged labour was the development of a fistula between the bladder and the vagina. This occurred as a result of pressure of the impacted fetal head against the back of the bladder. Occasionally the urethra was involved as well or fistulation would also take place into the rectum. This complication was especially likely to occur when there was severe pelvic disproportion – all too common in women with rickets.

The state of these unfortunate women was pitiful – smelly infected urine dribbled continuously from the vagina, contaminating clothes and bedding. The thighs became excoriated and infected. The patient – all too often a teenager – became a social outcast.

Today this complication of childbirth is extremely rare in the developed world, where adequate obstetric care is available and there is early recourse to caesarean section in difficult cases. However, it is still seen, all too often, in developing countries. When I was an external examiner in surgery in Ethiopia, some 40 years ago, I visited the internationally famous Fistula Hospital in Addis Ababa, with its two British surgeons, which was devoted entirely to the treatment of this condition. The tally at that time was 1500 operations.

It was Marion Sims, in the USA, who pioneered the successful treatment of this condition. This year marks the 200th anniversary of his birth.

Marion Sims was born in 1813, 10 miles outside the little town of Lancaster in South Carolina. His father, a landowner, was a descendant of English colonists in Virginia. In 1833 Sims attended a course of 14 weeks of lectures at Charleston Medical College and the following year enrolled at Jefferson Medical College in Philadelphia. After 5 months he received

his diploma as ‘physician and surgeon’. During his brief course of studies, he did some dissections and assisted the professor of surgery with a number of operations. On qualifying, he married his childhood sweetheart.

So, in 1835, with a bare minimum of training, Sims returned home to set up in practice; he was now 22 years of age. He soon moved to a small settlement outside Montgomery, Alabama, where he performed his first operation, the drainage of a quart of pus from a man’s abdomen. This was followed by other successes, including the repair of a girl’s severe cleft lip deformity. Among his early patients were three young black slaves with vesico-vaginal fistulas.

Now came a landmark event. Sims was asked to see a plump 46-year-old woman who had fallen from her horse and had acute retroversion of the uterus. Sims examined her vaginally in the knee-elbow position and noted that the vagina filled with air, enabling an excellent view of its lining walls to be obtained – incidentally, the retroversion righted itself. Sims realized that in this position he would be able to visualize the fistulas in his patients. He purchased a pewter spoon, bent it and produced the first ‘Sims’ vaginal speculum’. He got an instrument maker to make a shiny metal retractor which reflected light and which afforded excellent visualization of the fistula. The two eponyms – ‘Sims’ position’ and ‘Sims’ speculum’ – were born and are still used today.

He now re-examined his fistula patient, Betsy: ‘I saw everything as no man had ever seen before. The fistula was as plain as the nose on a man’s face’. Sims opened a small, seven-bedded hospital and his first three fistula patients were the slaves Betsy, Lucy and Anarcha – the latter also had a recto-vaginal fistula. His first operation, in 1845, was on Lucy, who bore the 3-hour procedure with great courage. (Fortunately, this was the year in which Morton later demonstrated the anaesthetic properties of ether in Boston.) Sims

freshened up the edges of the fistulous track and sutured the defect with fine silk sutures. On removing the stitches, the fistula promptly reopened. Repeated attempts at repair broke down. Sims realized that his silk sutures resulted in inflammation and breakdown of the wound and decided to use stitches of silver. In May or June 1849, he cured Anarcha, at her 30th operation. Four fine silver wire sutures were used and the bladder kept empty by means of a catheter. A few days later, examination showed that the wires were completely clean, with no signs of inflammation. When the wires were removed, no leakage took place. Operations on Betsy and Lucy soon followed. Both were cured within weeks.

In 1853, Sims moved to New York and 2 years later opened The Women’s Hospital, devoted to the treatment of gynaecological fistulas, which flourished. However, the outbreak of the American Civil War (1861–5) made the position of a Southerner in the North a difficult one and Sims departed to Europe. Here he made his name internationally. He demonstrated his operation at the Rotunda Hospital, Dublin, performing two successful fistula repairs. He operated in Edinburgh, and at the Samaritan Hospital, London, watched by Spencer Wells. Here tragedy occurred – his patient died 5 or 6 days after surgery and autopsy showed that the lower ends of both ureters had been occluded. This was the first death in a series that had grown to several hundred patients. He now opened a fistula hospital in Paris and resolved to remain in Europe. He did not return to practice in New York until the war approached its end.

After the outbreak of the Franco-Prussian War in 1870, Sims returned to France to organize the Anglo-American Ambulance Corps, and then spent his remaining years in practice between Europe and America. He died in 1883, in his 70th year. **BJHM**

Conflict of interest: none.

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