MEDICAL HISTORY

James Marion Sims: some speculations and a new position



Caroline M de Costa

This 19th century US gynaecologist still arouses controversy in the 21st century

"PASS ME THE SIMS" is a request heard every day during gynaecological surgery and as often in outpatient practice. The Sims speculum has been a valuable gynaecological aid throughout the world since the first example was crudely fashioned from a pewter spoon in 1845 by James Marion Sims, a general practitioner in Montgomery, Alabama.² Sims went on to perfect the instrument that, with little variation, is still widely used in most vaginal surgery and for outpatient assessment of cervical and vaginal conditions, especially prolapse and fistulas. "Sims' position" or the exaggerated left lateral position was devised a little later, as

To the indomitable courage of these long-suffering women, more than to any one other single circumstance, is the world indebted for the results of these persevering efforts. J Marion Sims, 1858¹ Sims experimented with the repair of vesicovaginal fistula in a small hospital he built for black women slaves with this condition. It is also widely used in surgery and examination today.

In the United States, Sims has often been

referred to, rather quaintly, as the "Father of Gynaecology"; certainly, he was one of those who developed gynaecology as a separate medical discipline.³ His statue stands in Central Park in New York (Box 1). However, in the latter part of the 20th century, the earlier idealistic views of Sims have been challenged by feminist writers and social historians.⁴⁻⁶ He experimented with women's bodies, these writers have said, in particular those of women slaves, and he did not use anaesthesia. While these criticisms are valid, I believe they warrant further examination.

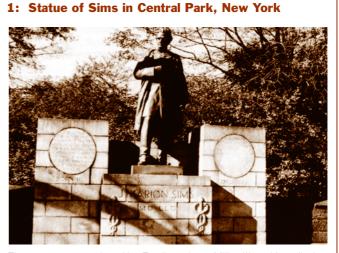
Sims and fistula repair

Sims was born in South Carolina in 1813 and studied medicine (indifferently, according to many biographers) at Charleston and later at Jefferson Medical College in Philadelphia.⁷⁻⁹ He returned to the South to practise and soon established a reputation as a skilful surgeon. He became interested in the condition of vesicovaginal fistula in 1845 when a young slave woman, known to posterity only as Anarcha, developed a fistula after a prolonged first labour. Until then, Sims had had little interest in "women's prob-

Department of Obstetrics and Gynaecology, Cairns Base Hospital, Cairns, QLD.

Caroline M de Costa, FRANZCOG, MPH, Obstetrician and Gynaecologist.

Reprints will not be available from the author. Correspondence: Dr Caroline M de Costa, Department of Obstetrics and Gynaecology, Cairns Base Hospital, PO Box 902, Cairns, QLD 4870. Carolinedec@hotkey.net.au



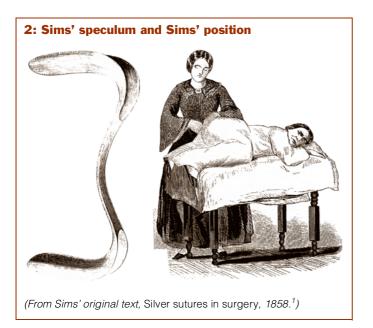
The statue was sculpted by Ferdinand von Miller III and installed elsewhere in New York in 1892, before being moved to Central Park in 1934.

lems". Surprisingly, within days, two more slaves with this condition, Betsey and Lucy, were referred by their owners. Scanning the available literature on fistula repair, Sims determined that there was no surgical cure and decided not to operate.^{2,3,7,9} However, another event that occurred within days changed his mind.⁷

He was summoned to a Mrs Merrill — a stout lady who had fallen from a pony and landed heavily on her pelvis, suffering an acutely painful retroversion of the uterus. Uncertain what to do, Sims placed her in the knee–chest position and in the course of his subsequent digital examination applied firm pressure to her perineum, allowing a large amount of air to enter the vagina. This vaginal distension together with the exaggerated knee–chest position caused the uterus to return to its anteverted state.^{2,3,7} As Pasteur would later observe, chance favours the prepared mind: Sims reasoned that a speculum that holds back the perineum, unlike the two- or three-pronged intravaginal models then in use, would similarly expose the upper reaches of the vagina, the site of vesicovaginal fistulas.⁹

This realisation led Sims to purchase a pewter spoon from a hardware store in Montgomery and to bend it into a U shape (Box 2). The following day, he examined Betsey in the knee-chest position with the bent spoon. Subsequently, he wrote:

I saw everything, as no man had ever seen before. The fistula was as plain as the nose on a man's face. The edges were clear, and welldefined . . . and the opening could be measured as accurately as if it had been cut out of a piece of plain paper . . . I said at once, Why can these things not be cured . . . there is nothing to do but to pare the edges of the fistula and bring it together nicely, introduce a catheter in



the neck of the bladder and drain the urine off continually, and the case will be cured. I felt I was on the eve of one of the greatest discoveries of the day.⁷

In fact, Sims penned this florid prose long after these events, in *The story of my life*, when he was well established as a gynaecologist in New York and Europe. Never short on self confidence, he was much given to embellishment and flowing narrative in his later accounts of his work. However, although Sims did give fascinating descriptions of his achievements, he did not spare himself in describing his failures.^{3,7,9,10}

Sims had specula and other instruments made and deliberately set out to cure fistulas. Initially, he continued to use his specula with the woman in an exaggerated knee-chest position, which is excruciatingly uncomfortable for any length of time. Later he realised that the exaggerated left lateral position afforded a better view of the upper and anterior vagina, and this became the position in which he continued surgical experiments (Box 2), and in which established procedures were henceforth performed.^{7,11}

In his autobiography, Sims explains that slaves (the original three and others) were subject to numerous attempts at closing their fistulas - without anaesthesia (which was not then widely available). Opium was administered during and after the procedures (Box 3). Sims claimed that he explained his intentions to the women, who were agreeable. He did not question the racial and social system that made his experiments possible, although in his later writing he did express concern for the welfare of the women involved. He also stated that the "stoicism of the Negro" made it possible for him to continue his surgical experiments — some 30 operations over four years on Anarcha before her fistula was successfully closed. His first operation, on Lucy, was particularly agonising for her, as he had not yet developed the catheter that he subsequently used for the bladder drainage essential for the success of any fistula repair. He used instead a piece of sponge which became infected and encrusted and difficult to remove.^{2,7}

Initially, Sims used silk to close the fistulous openings, but healing was never complete. Finally in 1849, he tried silver wire held with perforated lead shot which, when compressed in a pair of forceps, enabled the sutures to be tied high in the vagina.⁹ Anarcha's fistula was closed permanently (according to Sims), and soon afterwards those of the other women.^{1,12} Subsequent writers have cast doubt on Sims' claims of complete cure, and it may be that, although the fistulous opening was healed, bladder function remained compromised — even after modern fistula surgery, stress and urge incontinence can be problems.¹²⁻¹⁵ However, there is no doubt that Sims had made great progress in the understanding and techniques of fistula repair (Box 4).

In 1850, Sims, suffering poor health, moved to New York with the idea of founding a women's hospital for the treatment of vesicovaginal fistula and, later, other gynaecological ailments. The New York Woman's Hospital opened its doors on Madison Avenue in 1855, later moving to the current site of the Waldorf–Astoria.² However, the hospital opened only after a great deal of interpersonal wrangling with certain New York doctors and financial difficulties for Sims; nevertheless, he persevered with his unique idea. Many poor Irish immigrant women were among those treated for fistulas at the Woman's Hospital, as Sims and other surgeons perfected fistula repair and other operations.^{2,7,9,18}

During the 1860s, Sims went several times to Europe, partly because of his unhappiness at the political events that culminated in the Civil War, and partly to demonstrate his surgical techniques. There is no doubting his surgical brilliance, which he displayed throughout the British Isles and in Paris. He treated European royalty, including the Empress Eugenie, wife of Napoleon III of France, who apparently had suffered an obstetric fistula. During the Franco–Prussian war of 1870, Sims took part in the Anglo– American Ambulance Corps, which treated the wounded of



An original painting by Robert Thom depicting the event with some artistic licence 100 years later (commissioned by the Parke–Davis Company, from A history of medicine in pictures, edited by Bender GA, 1961).

4: Fistula repairs before Sims

Sims was not the first to repair vesicovaginal fistulas successfully. There are some reports of European surgeons doing so. In 1836, John Peter Mettauer in Virginia and, in 1839, George Hayward in Massachusetts succeeded in closing fistulas. Twenty-five years before Sims' experiments, Montague Gosset in England had used silver wire in a fistula repair, and the use of lead shot to hold wire sutures in place was also known.^{1,16,17} However, what Sims did do was to combine and apply all these principles systematically, with skill and persistence, and to publicise his techniques.

both sides.⁷ Returning to the United States, he became president of the American Medical Association in 1876, and founder and then president of the American Gynaecological Association.

In defence of Sims

It is not surprising that the idealistic view of Sims has been challenged,⁴⁻⁶ given his turbulent life and self-promotion. It is true that his initial experiments on fistula repair were on slave women, and that he did not use anaesthesia. However, other factors must be considered.

Firstly, the nature of vesicovaginal fistula itself — without surgery, these women were condemned to the most miserable existence. Better understanding of labour and avoidance of a prolonged second stage by operative delivery means that obstetric fistulas rarely occur in countries with good obstetric services, and modern writers with no experience of the condition have tended to overlook the appalling results of fistulas.⁴⁻⁶ "A sadder situation can hardly exist than that of a woman afflicted with a vesico-vaginal fistula", wrote Johann Friedrich Dieffenbach in 1836, "a source of disgust, even to herself, the woman beloved by her husband becomes, in this condition, the object of bodily revulsion to him...".¹⁰ Dieffenbach's concern for women with fistulas was shared in the late 20th century by Drs Reginald and Catherine Hamlin, who founded the famous Ethiopian Addis Ababa Fistula Hospital, and Dr Kees Waaldijk, who has established a similar service in northern Nigeria; "these patients are the forgotten women, rejected by their husbands and sometimes by their families because their bodies have suffered excessive trauma during childbirth", Waaldijk has said.^{14,19}

More than 150 years after Sims' first successful repairs, more than two million women in the world suffer from obstetric fistulas, a preventable condition. Most are in resource-poor countries, especially in Africa, parts of Asia and Papua New Guinea, where antenatal and intrapartum care are minimal or non-existent, and where early childbearing and poor nutrition contribute, as in the pre-Civil War southern United States, to the development of fistulas. Although Sims recognised the obstetric causes of fistulas, he lived in an era that preceded the safe use of caesarean section, synthetic oxytocic drugs, antibiotics and the many other aids to safe childbirth that are now available. He was not in a position to prevent the formation of the fistulas he attempted to treat.

Partly because of the path Sims' life followed and because of his writings, some historians have accused Sims of being motivated principally by a desire to experiment on black women with a view to later treating wealthy white women.⁴⁻⁶ However, as a young man living in the deep South and treating black women with a condition largely associated with their poverty, Sims could not have anticipated the later course of his life or expected that fistula repair would make him competent in the practice of gynaecology, a specialty that did not exist in the 1840s. Hideous as the accounts of his surgery may appear to sensitive 20th century eyes, undoubtedly Sims was at least partly motivated by a desire to improve the lot of his slave patients.^{2,7} In this, he was no different from many 19th century surgeons experimenting with the techniques that are the foundation of current surgical practice, gynaecological and otherwise. The lives of the slave women on whom Sims experimented would have been even more miserable without their subsequent cures, and the knowledge gained has been applied to fistula repair for thousands of women since.

Secondly, Sims did not use anaesthesia for his early fistula repairs because it was not yet widely available. Humphry Davy had discovered the anaesthetic properties of nitrous oxide in 1799, but its usefulness for surgery was not immediately appreciated. Sulfuric ether was first used by Crawford Long in Georgia in 1842, but he did not write about his discovery until 1849. By the early 1840s, a small number of doctors and dentists knew of the existence of anaesthetic agents, but the idea that they could be safely used to numb the pain of surgery, like the concept of antisepsis some time later, took years to be universally accepted. In 1845, Horace Wells unsuccessfully demonstrated anaesthesia for dentistry; in 1846, William Morton in Boston was more successful. The Lancet of 1845 carried only five short mentions of ether in 780 pages, and, as late as 1850, when James Young Simpson published his recommendations for the use of ether and chloroform in midwifery, he had to contend with vociferous opposition from clergymen who pronounced anaesthesia to be against the will of God.^{20,21}

It is then not surprising that Sims in Alabama in the 1840s did not anaesthetise his patients. Certainly all previous attempts at fistula repair, like virtually all other surgery, on free white people as well as slaves, had been done without anaesthesia. Later in New York, Sims did use chloroform, which he pronounced "both delicious and dangerous".⁷ Interestingly, Sims was remarkable for his attention to cleanliness in his surgery, well before the advent of Listerism, which probably contributed to his ultimate surgical success.

Sims' role in the development of gynaecology is incontestable, but in remembering his contribution to vesicovaginal fistula repair the names of Anarcha, Betsey and Lucy should also be remembered. Others of his contributions are remembered daily by every generation of gynaecologists — the Sims' speculum and Sims' position.

References

- Sims JM. Silver sutures in surgery, the anniversary discourse before the New York Academy of Medicine. New York: Wood, 1858: 1-55.
- 2. Harris S. Woman's surgeon. New York: Macmillan, 1950: 84-86.
- Kenny SC, Ward JL, Bryan CS. James Marion Sims and the rise of gynaecological surgery. J Med Biography 1999; 7: 217-223.
- McGregor DK. Female disorders and nineteenth century medicine: the case of vesico-vaginal fistula. *Caduceus* 1987; Spring: 1-87.
- Ojanuga D. The medical ethics of the "Father of Gynaecology" Dr J Marion Sims. J Med Ethics 1993; 19: 28-31.
- McGregor DK. From midwives to medicine the birth of American gynecology. New Brunswick: Rutgers University Press, 1998: 41-45.
- 7. Sims JM. The story of my life. Edited by his son, H Marion-Sims. New York: Appleton, 1884: 15-27, 226-246.
- Morantz-Sanchez R. Conduct unbecoming a woman. New York: Oxford University Press, 1999: 92-97.
- Marr JP. Pioneer surgeons of the Woman's Hospital. Philadelphia: Davis, 1957: 28-43.
- 10. Ricci JV. One hundred years of gynaecology. Philadelphia: Blakiston, 1945: 111-112.
- Speert H. James Marion Sims, the Sims position and the Sims speculum. In: Obstetric and gynecological milestones. New York: Parthenon, 1996: 481-487.

- Zacharin RF. A history of obstetric vesico-vaginal fistula. Aust N Z J Surg 2000; 70: 851-854.
- Moir JC. Personal experiences in the treatment of vesico-vaginal fistula. Am J Obstet Gynaecol 1956; 71: 478-491.
- Hamlin C. Newsletter from Dr Catherine Hamlin AC, Addis Ababa Fistula Hospital, Ethiopia. May 1998, Oct 1999, May 2000, Feb 2002.
- Murray C, Goh J, Fynes M, Carey M. Urinary and faecal incontinence following delayed primary repair of obstetric genital fistulae. *Br J Obstet Gynaecol* 2002; 109: 828-832.
- 16. Sims JM. On the treatment of vesico-vaginal fistula. *Am J Med Sci* 1852; 23: 59-82.
- 17. Pozzi S. A treatise on gynaecology. Vol I. London: The Sydenham Society, 1892: 250-255.
- 18. Sims JM. Clinical notes on uterine surgery. New York: Wood, 1873: 49.
- 19. Hunt L. Africa's forgotten women. ORGYN 1997; 1: 2-7.
- Kitz RJ, Vandam LD. A history and the scope of anesthetic practice. In: Miller RD, editor. Anesthesia. New York: Churchill Livingstone, 1986: 3-8.
- 21. Chavasse HP. Advice to a wife on the management of her own health. London: Churchill, 1877: 225-226.

(Received 25 Feb 2003, accepted 17 Apr 2003)