Review

Sarah Bernhardt's 'Doctor God': Jean-Samuel Pozzi (1846-1918)

Caroline DE COSTA¹ and Francesca MILLER²

¹Department of Obstetrics and Gynaecology, School of Medicine, James Cook University, Cairns Campus, PO Box 902, Cairns, Queensland, Australia, and ²9724 South 11th Avenue, Inglewood, California, USA

Abstract

Samuel Pozzi was a major figure in the early development of modern gynaecological surgery. His textbook, *A Treatise on Gynaecology*, published in French in 1890 and rapidly translated into five other languages, was the first internationally acclaimed text integrating modern principles of anaesthesia, antisepsis, diagnosis, surgical technique and postoperative care, and in later editions remained a standard reference up to the 1930s. He was the author of more than 400 papers on gynaecological and general abdominal surgery and his technical expertise drew surgeons from all over the world to his theatre in the Hospital Broca, in one of the poorer parts of Paris. He was equally successful in several professional fields apart from medicine. However, his name is now little known in the English-speaking world. This short biography aims to re-introduce Pozzi to readers of English.

Key words: France, history, nineteenth century, peer gynaecology

In 1990, there appeared on the walls of the Armand Hammer Museum in Los Angeles a striking portrait of a dark, full-bearded man in his mid-thirties. Painted by John Singer Sargent in Paris in 1881, *Dr. Pozzi at Home* had remained in private hands for more than a century. The portrait aroused intense admiration and speculation in the USA and other venues where it was shown: Who, the public wanted to know, was Dr Pozzi? To date, this question has not been well answered in English.

Often called 'the father of French gynaecology' Samuel Pozzi had enormous influence on the development of the discipline of surgery for women that emerged at the end of the nineteenth century – an influence that extended throughout Europe, the Americas, China and Japan. He studied and worked in Paris but travelled widely and received in Paris hundreds of surgeons from all parts of the world who came to observe his techniques both of gynaecological and general surgery.²

Early years

The Pozzis were Huguenots, Protestants who migrated from Italy via Switzerland to south-western France in the eighteenth century. Samuel was born in 1846 in Bergerac, a pretty town on the River Dordogne; his father was a pastor and his mother came from a long-established Protestant farming family. She died, probably from tuberculosis, when Samuel was 10; her death was followed soon after by that of his sister Marie, from typhoid – possibly these events influenced his choice of career.² His mother's place was taken

by a much-loved grandmother and by an English stepmother when his father remarried; Samuel grew up fluent in English and French. He spent a happy childhood but studied hard and was imbued with the Protestant work ethic. Educated at *lycées* in Pau and Bordeaux, he did brilliantly in the *baccalauréat* of 1864 and was accepted as a medical student in the University of Paris.³ Here he was also very successful academically, obtaining a coveted place as a surgical *intern* (the equivalent of today's registrar) after completing basic studies, and winning the gold medal of the Faculty of Medicine in 1872. His doctoral thesis, in 1873, was on rectal fistula. By 1875, when he obtained the title of *agrégé*, professor in the University of Paris, his interest in the newly emerging area of pelvic surgery for women was clear – his thesis was on the surgical treatment of uterine fibroids.⁴

Pozzi's medical studies were interrupted by the Franco-Prussian war of 1870, for which he volunteered. He was shocked by the deaths of French soldiers from sepsis following wounds which in themselves would have been amenable to treatment. In 1876, he travelled to Scotland for the British Medical Congress of that year and met Joseph Lister, whose efforts since 1865 to demonstrate the importance of antisepsis in surgery had met with mixed

Correspondence: Professor Caroline de Costa, Department of Obstetrics and Gynaecology, School of Medicine, James Cook University, Cairns Campus, PO Box 902, Cairns, Qld 4870, Australia. Email: caroline.decosta@jcu.edu.au

DOI: 10.1111/j.1479-828X.2007.00756.x

Received 17 April 2007; accepted 25 June 2007.



Portrait of Pozzi by John Singer Sargent, Dr. Pozzi at Home (1881), which hangs in The Hammer Museum, Los Angeles. Reproduced with permission of The Hammer Museum, Los Angeles, CA.

reactions from his British colleagues. Pozzi was an immediate convert to 'Listerism' – returning to France, he published a short tract on Lister's techniques and was instrumental in introducing these to French surgeons.⁵

Development of the new discipline

As an agrégé, Pozzi worked in an honorary capacity in Paris public hospitals as well as establishing a private practice from

his home in the desirable location of the Place Vendôme, an area he was able to afford following his marriage to a wealthy heiress from Lyon, Thérèse Loth-Cazalis. In his public practice, particularly, he worked assiduously to establish gynaecology as a specialty in its own right. In 1883, he was appointed Director of the Surgical Service at the Lourcine-Pascal Hospital in the poor quarter of Gobelins. This was a post aspiring surgeons had always held only briefly before moving to greener pastures; however, Pozzi had different plans. The hospital itself had two large wards filled with chronic medical cases but in the garden Pozzi found three 'temporary' wards, badly constructed shacks flung up for a typhoid epidemic the previous year. He took over one of these structures of 20 beds, secured the services of two interns, and boldly declared 'this will be the first specialist gynaecological service in Paris'.2

There was at first no operating theatre – surgery was done in the ward, in the patient's bed. Pozzi brought in his own instruments and had windows put in to dispel the gloom, as well as running water and a porcelain basin to hold the phenol necessary for sterilising instruments and hands. Finally, he installed his own operating table in what would become the hospital's first theatre. He was to stay at Lourcine-Pascal (later the Broca Hospital) for 30 years.

At the same time he applied to the University of Paris for permission to conduct a course in gynaecology, but was rejected by the Dean of the Medical Faculty with a curt note: 'Monsieur, I am absolutely opposed to your proposition which might even lead to demands for another Chair ... it's enough that you already have the title of Professor.' Pozzi gave the course anyway, for free, and continued to do so annually throughout his time at the hospital. In 1901, he was appointed to the first Chair of Gynaecology in Paris.^{2,3}

The treatise

In 1890, following 15 years of consulting, operating, reading and teaching, Pozzi published his 1100-page *Traité de gynécologie* in Paris. This was rapidly translated into English, appearing (in three volumes) in the USA and Britain in 1892 and 1893 as *Treatise on Gynaecology – Clinical and Operative*; translations were also made into German, Spanish, Italian and Russian. The work went to three editions and served as a standard text until the 1930s.^{6,7}

The *Treatise* demonstrates Pozzi's scholarship and his meticulous devotion to detail in his diagnostic and surgical practice. It opens with a 34-page description of the most up-to-date techniques of asepsis and antisepsis of the time, including the disinfection of instruments, operating field and the hands of operators (surgical gloves had yet to be invented). There follows a chapter on anaesthesia in gynaecological surgery – Pozzi deals with chloroform and ether for laparotomies and major vaginal surgery but does not neglect the usefulness of local anaesthesia in the form of cocaine for many procedures. Much of the remainder of Volume 1 is taken up with the importance of accurate gynaecological

examination and diagnosis, the principles of which remain valid to the present day, and pathological anatomy, in which Pozzi demonstrates his encyclopaedic grasp of female anatomy gained in the dissecting rooms of the Paris Faculty of Medicine. He also engages in a thorough explanation of the principles of haemostasis and of wound closure, accompanied by clear diagrams and drawings.

Volumes 2 and 3 contain descriptions of specific operations including removal of ovarian cysts (in the absence of ultrasound and radiology these could only be diagnosed clinically, and often reached such a size as to produce cachexia in the woman), vaginal and abdominal hysterectomy, repair of vesico- and recto-vaginal fistulae and the treatment of cervical and endometrial cancers. Pozzi's own techniques are described, but also those of the leading surgeons in other European capitals and the USA. At the time there was a wide-ranging debate as to the wisdom of performing 'castration' (bilateral oophorectomy) for women with menorrhagia who had concurrent medical contraindications to the more formidable procedure of hysterectomy; Pozzi took an admirably cautious view, admitting that the procedure might sometimes be indicated but may have long-term consequences. These volumes, too, are beautifully illustrated and well referenced; Pozzi read English, German and Italian, and his European and American colleagues are all amply acknowledged in his work. The Treatise is still available in English in most Australian medical libraries, where Pozzi's lucid and concise prose may be studied.

Pozzi, in the course of his professional career, published more than 400 papers on all aspects of gynaecological surgery as well as on abdominal trauma and general surgery and medico-political matters. He designed and developed numerous surgical instruments including haemostatic clamps, forceps for applying ligatures and extracting foreign bodies, a tenaculum, curettes, a device to enucleate fibroids and syringes to disinfect the vagina. While no operation now bears his name, his surgical technique gained him worldwide fame and brought hundreds of visiting surgeons to the Broca. He was so well known to the poorer citizens of Paris through his public hospital work that picture postcards of him were sold in the streets.

Pozzi's American travels

By the time Pozzi first visited the USA in 1893, the *Treatise* had made his reputation in North America. He travelled there again in 1904, meeting among others, Halsted and Howard Kelly in Baltimore, Webster in Chicago and the Mayo brothers in Rochester. From these visits he drew upon the idea of professional nursing schools attached to hospitals and of committees of citizens devote to fundraising, both of which he instituted in his own hospital. In 1904 in Montreal he also met Alexis Carrel, pioneer of transplant surgery, and became a strong supporter of his work. Later, in 1913, with Georges Clemenceau, also a doctor and twice Prime Minister of France, he organised the first World Congress in Transplant Surgery in Paris.^{2,8}

In 1909, Pozzi was sent as the representative of French gynaecologists to New York, to a conference to celebrate 'a century of ovariotomy'. In 1809, Ephraim MacDowell of Kentucky was the first to successfully remove an intact ovarian cyst. His patient, a courageous woman named Jane Crawford, aged 47, had travelled on horseback more than a hundred kilometres to undergo the operation - preceded by her cyst, which contained 15 litres of fluid.9 Lacking anaesthetic, MacDowell had two solid farmers hold her down in an armchair in his parlour for the 25 minutes in which he drained the fluid, cut out the wall of the cyst and closed the wound. Jane is said to have coped by singing psalms certainly she survived, living to the age of 79. One hundred years later, ovariotomy under general anaesthesia and aseptic conditions was a safe and effective procedure that cured thousands of women of debilitating symptoms. Pozzi spoke authoritatively, in English, on the French contribution to this surgery, and received a standing ovation.²

Sarah Bernhardt's 'Doctor God'

Pozzi met the actress Sarah Bernhardt, the first international 'star', in 1869 when he was a medical student in the Latin Quarter and she was playing at the adjacent Odéon Theatre. They began an affair that lasted until Pozzi's marriage in 1879, and a close friendship that continued until his death. He became her medical adviser and often personal physician; she called him *Docteur Dieu*, Doctor God, while for him she was the 'Divine Sarah'. ^{2,10} Pozzi was involved in assisting her when she set up the Odéon as a military ambulance post during the Franco-Prussian War.

In 1898, Sarah became unwell, Pozzi was called and on examining her, found an ovarian cyst that was rapidly enlarging and required removal. She demanded that Doctor God himself operate – she had confidence in no-one else. Pozzi agreed, but clearly found the experience stressful. In a letter to his friend, Robert de Montesquiou, Parisian arbiter of style and patron of the arts, he wrote:

20 February 1898

Dear Friend,

Sarah is convalescing well, cutting corners as usual. Decisive, courageous, firm and obedient ... she will recover more quickly than most.

Having played every other role, from Phaedra to Joan of Arc, she wished also to play the role of surgical patient, which she has done to perfection!

Her cyst was no common one – elegant, deep-seated, with numerous extensions into the broad ligament, from where I had to dig them out (excuse the vocabulary!) – it was quite a struggle. The cyst was the size of the head of a 14-year-old child.

What a relief to have it done! I felt as 'delivered', as operated upon, as my dear friend.

In six weeks she will be on stage again ...²

© 2007 The Authors



Dr Pozzi in the uniform of a military surgeon during WWI (1918). Reproduced with permission of the copyright holder.

During World War I, Sarah developed severe osteoarthritis in her right knee and was incapacitated by pain; eventually Pozzi consented to arrange the amputation she requested. He had re-enlisted at the age of 68 as a military surgeon in the French Army, but took time off from his care of the wounded to travel to Bordeaux to supervise the procedure, and Sarah returned to continue her profession until her death in 1923.^{2,10}

From the beginning of his career, Pozzi was a patron of the arts and counted among his friends authors, poets, painters and actors. It was through these connections that he met Sargent in 1881. He was also a friend of the Proust family; he corresponded regularly with Marcel until his own death, and Marcel's brother, Robert, also a surgeon, served for ten years as his first assistant at the Broca. Pozzi believed strongly that attractive surroundings in a hospital encouraged the healing process – he commissioned numerous artists to paint murals and pictures for the walls of his hospital, the most notable being Georges Clairin, whose painting *Health Restored to the Sick* featuring Sarah Bernhardt as the radiant portrayal of Health, can still be seen in the Museum of the Assistance-Publique in Paris.

Other professional interests

As an *intern*, Pozzi spent some time in the service of the eminent neurologist Paul Broca, and he retained a life-long fascination with brain function and also with anthropology, another of Broca's interests. In 1873, Pozzi translated Charles Darwin's major work, *The Expression of the Emotions in Man and in Animals*, into French, and he continued to correspond with Darwin up until the latter's death. He was a life-long member, and finally President, of the French Society of Anthropology, presenting numerous papers on comparative anatomy and brain function. Pozzi was also a highly regarded antiquarian and collector of coins, travelling frequently to Greece, Italy and North Africa; at the time of his death his collection was one of the most prized in Europe.²

In 1898, he was elected to the French Senate, representing his native Dordogne. This was at the time of the Dreyfus Affair, an event that split French society and almost caused the downfall of the Third Republic. Pozzi, a Republican, humanist and strong opponent of anti-Semitism, was always a supporter of the falsely accused French Army captain. In 1899, he attended the second trial of Dreyfus in Rennes as an observer for the Senate, and became one of the group around Clemenceau and the writer Emile Zola, who eventually succeeded in obtaining a pardon for Dreyfus. 11 In 1909, during the interment of the body of Zola in the Pantheon in Paris, a fanatical opponent attempted to shoot Dreyfus, who was present. Pozzi pushed the gunman out of the way, saving the life of Dreyfus, who was only slightly wounded in the shoulder. Pozzi spent four years as a senator, during which time, among other works, he carried out major reforms of the baccalauréat examination.

Military and other abdominal surgery

In 1886, Pozzi attempted one of the first laparotomies in France to repair gunshot wounds of the abdomen, hitherto considered hopeless by his colleagues. The patient was a 15-year-old English schoolboy who had accidentally shot himself while inspecting a revolver in a gunsmith's shop. Like much private surgery at the time, the operation took place on the dining table of the boy's home, to which Pozzi brought instruments, a phenol sterilising apparatus, and an anaesthetist. Unfortunately, the boy died on the fourth postoperative day, apparently from paralytic ileus. Pozzi was criticised by some colleagues for attempting the surgery but he was encouraged by the fact that there was no peritonitis at autopsy, persisting with his attempts, particularly during World War I when improved techniques of fluid replacement and blood transfusion made such surgery much more successful. In the first three years of the war, he published more than 40 papers on military surgery and the treatment of wounds, an enormous contribution to improved results in this field. Pozzi was also the first surgeon in France to perform a successful gastroenterostomy, in 1889.2

In June 1918, Pozzi was murdered in his consulting rooms by a deranged patient, Maurice Machu. He had previously operated on Machu for varicocoele. Machu believed, falsely, that the operation had made him impotent and demanded that Pozzi operate again, which he declined to do. Machu shot Pozzi four times in the abdomen then committed suicide. Friends, including Prime Minister Clemenceau, rushed to the scene. Pozzi, still alive, was conveyed to a nearby hotel where one of his former interns, Dr de Martel was summoned to conduct a laparotomy. Pozzi refused general anaesthesia and ordered local infiltration. Clearly aware of the irony of the situation, he directed the operation but rapidly weakened as, in fact, the right internal iliac vein had been perforated. Prior to his death, he asked to be buried in his military uniform; this wish was carried out when he was buried in Bergerac after a funeral procession in Paris, in which thousands lined the streets. A few days after his death, Marcel Proust wrote to a mutual friend: 'My pain was so deep - I who had always known Pozzi. I am thinking ... about his kindness, his intelligence, his talent, his beauty, of everything the veneration of which constantly sustained in me in the old days (before the war) ...'2,12

Pozzi's tenaculum is still used in French gynaecology. His name is attached to streets and buildings in Bergerac and Paris, but above all he is commemorated, like others of his generation, in our daily practice of systematic and scientific gynaecological care for our patients.

Acknowledgement

We gratefully acknowledge the assistance of M. Nicolas Bourdet, great-grandson of Samuel Pozzi, who freely shared with us the Pozzi archives in Paris while we were preparing this paper.

References

- 1 Ormond R, Kilmurray E. John Singer Sargent: The Early Portraits. London: Paul Mellon Centre for British Art, 1998.
- 2 Vanderpooten C. Samuel Pozzi Chirurgien et Ami des Femmes. Paris: V&O Editions, 1992.
- 3 Schlumberger G. Mes Souvenirs. Paris: Plon, 1930.
- 4 Pozzi S. De la Valeur de l'hystérotomie dans le Traitement des Corps Fibreux de l'Uterus. Paris: Masson, 1875.
- 5 Pozzi S. Quelques Observations à Propos du Pansement de Lister Appliqué aux Plaies d'Amputation et d'Ablation de Tumeurs. Paris: Delahaye, 1876.
- 6 Pozzi S. Traité de Gynécologie Clinique et Opératoire. Paris: Masson 1890.
- 7 Pozzi S. A Treatise on Gynaecology Clinical and Operative. London: New Sydenham Society, 1892.
- 8 Carrel A. L'homme Cet Inconnu. Paris: Plon, 1935.
- 9 Schachner A. Ephraim McDowell Father of Ovariotomy. Philadelphia, PA: Lippincott, 1921.
- 10 Gold A, Fitzdale R. The Divine Sarah. New York: Knopf, 1991.
- 11 Bredin J-D. The Affair The Case of Alfred Dreyfus. (Translated by Mehlman J) New York: Braziller, 1983.
- 12 Le Professeur Pozzi a été Assassiné Hier. Figaro, 1918, 14 June.

356 © 2007 The Authors