

A Painless Surgery Joseph Johnstone Performed on a Mesmerized Patient in Madras in 1847

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Abstract

Before the demonstration of the usefulness of nitrous oxide, ether (sulphuric ether), and chloroform as potent anaesthetics, surgical procedures were carried out in conscious patients, who were administered either liquor or narcotics, further to being physically restrained. Because this practice was far from desirable, the claim of Mesmer in Vienna, made in 1779, for providing pain relief based on his theory of ‘animal magnetism’ (mesmerism) appealed to some medical practitioners in Europe. Mesmerism was the forerunner of hypnosis and was practised in continental Europe and England for pain management, including less frequently, in surgical procedures prior to the recognition of the above chemicals as potent anaesthetics. British doctors practising medicine in India tried mesmerism previously trialled in Europe. Joseph Johnstone was a British doctor practising in Madras in the 19th century, who took a cue from surgical experiences reported by James Esdaile in Calcutta, excised a large, soft tumour from the back of a woman successfully, using ‘mesmerism’. His report is of historical interest.

Key words: Anaesthesia, James Esdaile, Johnstone medal, Mesmerism, Nineteenth century, Soft tumour excision.

1. INTRODUCTION

Very little is known about the life of Joseph William Turner Johnstone in Madras. What instigated him come to Madras to practice medicine is not clear. He lived and practiced at ‘23 Pantheon Road, Madras’ in the 1840s. Before arriving in Madras, he trained in general medicine and in obstetrics—gynaecology with James Young Simpson (1811–1870, first medical user of chloroform on humans in 1847) of the Edinburgh University Medical School. Johnstone practiced medicine in Madras for less than four years. He excised a tumour from the shoulder of a European woman in Madras, operating on her while retaining her under mesmeric influence (Elliotson, 1847–1848). He published his work privately under the title *Notes of a Case of a Painless*

Surgical Operation Performed while the Patient was under the Influence of Mesmeric Agency (Johnstone, 1847) (Fig. 1) dated ‘February 1847’. The wrapper of this publication reveals that Johnstone had an M.D. from Edinburgh and a licentiate from the Royal College of Surgeons (of Edinburgh?). He was the past President of the Royal Medical Society (of Madras?) and a Member of the Medico-Chirurgical Society of Edinburgh. The symbols ‘&c.’, ‘&c.’ (*et cetera*) on that page communicate nothing meaningful. Johnstone died due to liver abscess in Madras in 1848 (Anonymous, 1849).

1.1 The Johnstone Medal in Madras Medical College

Johnstone’s premature death prompted the establishment of the Johnstone medal at the

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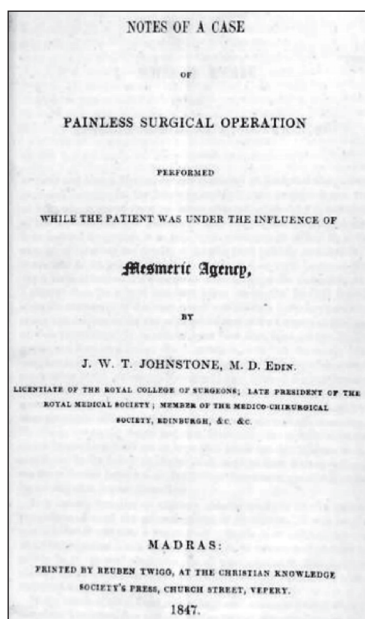


Fig. 1. Joseph Johnstone's monograph.

Madras Medical School (MMS, later Madras Medical College, MMC) in his memory. The words *Nunquam non paratus* (never unprepared) — the motto of the Johnstone clan of Scotland, the serpent-entwined rod of *Asclepius*, and the caption 'The Johnstone Medal 1848' occurred on the medal's obverse. The inscription 'presented by 91 subscribers with the sanction of the Government to the most deserving student in the Madras Medical School in gratitude and affectionate memory of Dr. J W T Johnstone, who died in Madras on 18 August 1848.' featured on the reverse (Storer, 1897). When established, this

medal was made of copper (Storer, 1897) and was awarded to students of the Junior Department of MMS (Wilkins, 1870)¹. Presently it is indicated as a gold medal and given to the best all-round performer in final-MBBS class of MMC. This is the most prestigious award in that college.

The present article sheds light on a surgery Johnstone performed in Madras on a European patient under the influence of mesmerism in 1847.

2. PAINFUL SURGERIES OF EARLY DAYS AND PAINLESS SURGERIES OF LATER DAYS

Surgeries are intended to alleviate suffering. Since anaesthesia was not known until the mid-19th century, patients remained conscious during surgical procedures before that time. They experienced an indescribable pain². Therefore, surgeries were the last option until the 1850s. Often, surgical procedures also ran the risk of infection, because of the incisions and raw wounds made in a poorly sterile environment. Recognition of sepsis and asepsis is a remarkable landmark event in medicine³.

Relief from pain during surgeries was one worrisome task, which early-time surgeons always wanted to achieve, although their success was minimal. Acupuncture in China, use of alcohol in Greece and Rome, and the use of mind-altering substances in Central-American nations were a

¹ As educational institution, MMC was committed to teaching and learning through clinical practice. MMC offered three teaching—learning pathways: to qualify (i) as a licentiate, (ii) as an assistant apothecary, and (iii) as a hospital assistant. Complying with these pathways, MMC had three defined departments: the senior, second, and junior. The senior department students (referred as licentiates, earlier) graduated with the title 'Graduate of the Madras Medical College' (G.M.M.C.) after five years of study.

² See the oil canvas, dated c. 1490 AD (available: https://en.wikipedia.org/wiki/Cutting_the_Stone), wherein the Dutch artist Hieronymous Bosch depicts the removal of a 'stone' using a metal drill for cutting a hole in the cranium of one Lubbert Das. With no anaesthetic, the pain Lubbert may have experienced can only be imagined (Fig. 2).

³ Louis Pasteur's (1822–1895) path-breaking finding that populations of organic-tissue decomposing microbes could be minimized with carbolic-acid washes. Carbolic acid was the first established antiseptic, named 'anti-putréfaction' by Pasteur in 1860 (Vallery-Radot, 1911). However the relevance of using carbolic acid in surgical theatres was shown by Joseph Lister (1827–1912), an English surgeon, who sterilized the surgical room by spraying carbolic acid and soaking the wound in carbolic-acid drenches. Lister's work inspired Joseph Lawrence (St. Louis, Missouri) to develop an alcohol-based formula for a surgical antiseptic, which included eucalyptol, menthol, methyl salicylate, and thymol. Lawrence named this 'Listerine' honouring Lister in 1871. The Listerine manufacturers found that it was equally powerful as a mouth-rinsing agent and recommenced its marketing as a mouthwash in 1895, which continues till date.

few attempts to minimize pain during surgeries. The *Suśruta Saṃhitā* of ancient India recommends the use of ‘wine’⁴ combined with the inhalation of the smoke of narcotic hemp (*Cannabis indica*, Cannabaceae) to induce an anaesthetic effect (Valiathan, 2007; Loukas, *et al.*, 2010). Making patients chew willow-tree bark pieces (species of *Salix*, Salicaceae [source of salicylic acid, ≈ aspirin]), leaves of cocoa (*Theobroma cacao*, Malvaceae, a weak source of cocaine), mandrake (*Mandragora officinarum*, Solanaceae), and opium (*Papaver somniferum*, Papaveraceae) was done in different parts of the world as potent somniferous agents during surgical procedures. Bleeding patients to a state of unconsciousness and using ice (where naturally available) were other crude tactics used to achieve a ‘painless’ state before and during surgeries (Semiatin, 2012).

Use of organic liquids as quietening agents started with the effort of the Swiss-born chemist alchemist Philippus von Hohenheim (‘Paracelsus’) (1490–1541), who first showed how *spiritus vitrioli* (≈ ether) could relieve pain, reduce fevers, and prevent complications of various diseases (Pagel, 1982).

Crawford Williamson Long (1815–1878), a qualified Surgeon in Jefferson, Pennsylvania, established the effectiveness of ether in a painless excision of a tumour in March 1842 (Long, 1849). William T G Morton (1819–1868), a dental practitioner in Massachusetts, successfully made a public demonstration that ether is an effective anaesthesia in 1846 (Fig. 2) (Concord, 1896). Horace Wells (1815–1848), also a dental practitioner, established nitrous oxide’s (N₂O) relevance in medical practice. Russian surgeon Stanislav Klinkovich (1853–1910) recommended the use of N₂O combined with oxygen for pain relief during childbirth in the 1880s. Use of N₂O prevails even today, used more as a mild anaesthetic along with measured volumes of

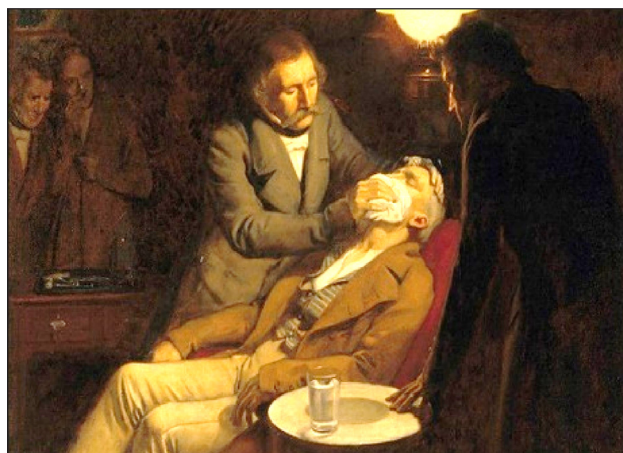


Fig. 2. An oil canvas depicting the use of ether by William Morton as an anaesthetic on a patient before a dental treatment in 1846.

[Source: Ernest Board, <http://catalogue.wellcome.ac.uk/record=b1203716> (Public Domain)].

oxygen. Robert Liston (1794–1847), a Scottish surgeon, renowned for his speed in pre-anaesthetic days of surgeries, especially amputations, and remembered for *Liston’s bone forceps*, used ether and exclaimed: ‘this Yankee dodge beats mesmerism hollow’ in 1846 (Anonymous, 1947). Ether anaesthesia certainly made surgeries far more tolerable than the other tactics used to quieten patients.

The conflict about the first discoverer of ether’s use as an anaesthesia and the US Congress’s mediation to arrive at an amicable decision on the ether controversy are well known. However, before 1845, mesmerism was one method resorted to by a few European surgeons to achieve pain relief during surgeries. This was, of course, not a preferred practice by every practising surgeon. Many surgeons saw the use of mesmerism in surgeries as a kind of black magic (Ernst, 2004).

3. FRANZ MESMER AND MESMERISM

Mesmerism was a significant practice trialled in pain management during surgeries, especially

⁴ ‘Wine’ in *Ayurveda* refers to fermented products such as *ariṣṭa*-s and *āsava*-s (Sekar and Mariappan, 2008).

in pre-anaesthesia days. Some surgeons of that period believed that an unknown, but useful element lay in mesmerism. John Elliotson (1791–1868) was one. He was the founding president of the London Phrenological Society (1823) and edited its official journal, the *Zoist*⁵. Elliotson was disliked by several of his contemporaries in Britain, because of his deep conviction in mesmeric practices. Liston publicly chastised Elliotson for his mesmerism-based practice (Fodor, 1934).

Franz Anton Mesmer's (1734–1815) work stimulated the application of mesmerism in medicine. Mesmer earned his doctor title by writing a dissertation entitled *De planetarum influxu in corpus humanum* (*On the influence of the planets on human body*) in Vienna. In this dissertation, Mesmer analyzed and discussed the influence of moon and planets⁶ on the human body and on human diseases in 1766⁷. Mesmer believed in that an energy transfer occurred between animals (including humans) and inanimate objects, which he termed as 'animal magnetism'. His *Mémoire sur la découverte du magnétisme animal* (Mémor on the discovery of animal magnetism) (Fig. 3) (Mesmer, 1779) made an incisive impact on the then medical science. A short report captioned 'Animal Magnetism' in an early 19th-century issue of *Literary Panorama and National Register* includes (Anonymous, 1817, p.269):

From Berlin we understand, that by a cabinet order respecting magnetism, it is directed that in order to prevent abuses as far as possible, only authorized physicians shall be allowed to attempt cures by magnetism. Those physicians who employ this means, are bound to deliver to their superior

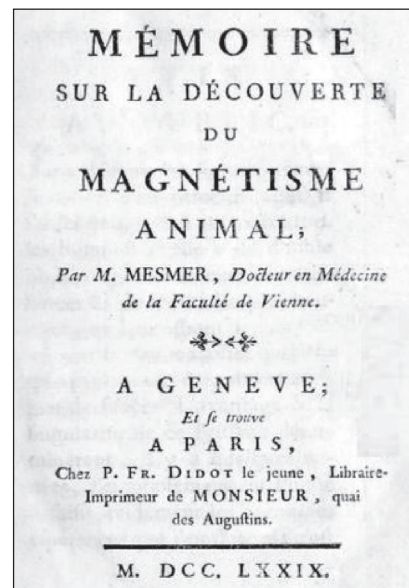


Fig. 3. Franz Mesmer's volume on animal magnetism (= mesmerism).

authorities, every three months, an exact amount of the disorders they have treated, and of the facts which they have observed.

Psychotherapy, practiced by many psychologists and some psychiatrists today (Benjamin, 2014) grew out of Mesmer's philosophy. Psychotherapy evolved out of the 'talking cure' (psychoanalysis) advocated by Sigmund Freud (1856–1939), Alfred Adler (1870–1937), and Carl Jung (1875–1961). Clyde Jones⁸, Chair of the Department of Anesthesiology, Naval Regional Medical Center, San Diego (Jones, 1975, p. 124) says,

In anesthesiology, hypnosis can be an exceedingly valuable tool. It is not a substitute for chemical anesthesia, but is used as an adjunct to conventional anesthetic techniques.

⁵ Phrenology is the study of the sizes and shapes of human crania, supposedly revealing human characters and capabilities. *The Zoist: A Journal of Cerebral Physiology & Mesmerism, and Their Applications to Human Welfare* was dedicated to mesmerism and phrenology. It was concurrently published by H Ballière in London, J B Ballière in Paris, and T. O. Weigel in Leipzig. The name *Zoist* was derived from 'zoe' (Greek) meaning 'life'. This journal appeared as a quarterly from 1843 to 1856. *The Zoist* was edited by John Elliotson (who first used Laennec's stethoscope in England) and Collins Engledue, both of who were ostracized by their medical colleagues in Britain because of their unconventional, mesmeric practices in medicine.

⁶ Mesmer chroniclers indicate that Mesmer was interested in astronomy.

⁷ The veracity of Mesmer's dissertation is challenged by Frank Pattie (1956).

⁸ Jones (1975) is worthy of reading, since it supplies a few other interesting remarks.

4. JOHNSTONE'S PAINLESS SURGICAL OPERATION

Johnstone in his report (1848) explains his conviction in applying mesmerism in surgical procedures.

The patient on whom Johnstone operated was the wife of a clergyman of the Church of England. The lady, whose name is not revealed (for privacy?), was a person of good health, who developed a field-pea size tumour on the posterior aspect of her right shoulder six years before. When she presented herself to Johnstone, the tumour had enlarged to $6 \times 4 \times 2\frac{1}{2}$ " ($15 \times 10 \times 6.5$ cm) extending from the 7th cervical vertebra towards the acromion and outer third of the scapula, along the outer edge of the trapezius muscle. A sensation of weight and modest numbness of the right arm were the principal difficulties she complained of. Johnstone indicates that he advised excision of that tumour six months earlier, which she did not prefer. In the meantime she had tried phlebotomy using leeches and applying discutient ointments, and other treatments, which were in vain. Finally she returned to Johnstone accepting excision. Johnstone recommended her to try the effect of mesmerism before the procedure. She objected to that, since she did not trust its efficacy. Finally, after some persuasion, she agreed.

We reproduce below his words, wherein he describes the mesmeric practice he applied on the woman in advance of the procedure to be done a few days later:

1st Mesmeric Sitting, January 2nd

Commenced at half past 7 A.M. and continued for two hours. The room was darkened and precautions taken to prevent interruption by noise & c. as was done at all the future sittings. The patient's pulse was 90 — skin cool — respiration natural. She lay upon her back in bed. ... I seated myself on a high chair at the head of the bed, so placed that by slightly bending forwards I could bring my face close to hers. I requested her to fix her eyes steadily on mine till she felt drowsy, when she was to shut them and compose

herself to sleep; at the same time I passed my right hand, with the fingers extended and slightly bent, gently over her face, from chin upwards, in close contact with, but not actually touching the skin. I kept my left hand in constant contact with her left shoulder, and breathed gently and frequently over her forehead and eyes. About one hour from the commencement, her eyes were shut, and she appeared to be slumbering, as indicated by her tranquil breathing, and the complete state of repose exhibited by her whole body, excepting occasional nervous twitchings of the hands and eyelids. On leaving off the manipulations at the end of two hours, and walking round to her right side, she opened her eyes heavily, and was speedily aroused. She said that she had felt sleepy, but did not think she had been asleep. Pulse still 90. I recommended another trial (though she did not appear very susceptible of the mesmeric influence) to which she consented somewhat reluctantly.

The above was repeated almost for the same length of time over the next seven days. On 9 January, Johnstone mesmerized the woman for three hours commencing a little after 7 A.M. She felt no drowsiness and sickness and sleepiness as had occurred in the preceding days. Body readings were normal. According to Johnstone, 'pulse—80, skin cool, respiration slow and tranquil'. She fell into deep sleep shortly at around 10 A.M. Mesmeric trance appeared perfect, cataleptic condition well developed, and sensitivity to pinching, pricking, loud noises, strong light, and ammonia vapour was absent. At quarter past 10, Johnstone turned her full upon face to start the surgery.

He made two elliptical incisions on the tumour, commencing half-an-inch (1.25 cm) superior and external to the spinous process of the 7th cervical vertebra, and meeting about half-an-inch below the centre of the outer half of the spine of the scapula: three incisions, each of seven inches (17.8 cm) long. He excised the tumour, which was slightly adherent to tissues below. Three arteries required ligatures. The bleeding was profuse initially, which lessened with time. The edges of the wound were sutured with four stitches and in-between spaces banded with adhesive plaster. The

surgery was completed in 18 minutes, during when the patient remained in a state of perfect insensibility.

Johnstone was assisted by Superintending Surgeon D S Young of Madras Army, Assistant Surgeon George Smith, a dresser and a nurse (both not named). Smith assisted Johnstone by maintaining the mesmeric passes along the patient's back throughout the procedure. One Thomas Key (Garrison Surgeon at Fort St George and conjoint Professor of Chemistry and Materia Medica, see the *Register of Intelligence for British and Foreign India, China, and All Parts of the East*, 1847, 5, 620) was invited to 'witness' the procedure. But he did not present himself.

Throughout the procedure, the pulse reading remained at 80 and respiration steady. Johnstone indicates that Young, besides assisting Johnstone, satisfied himself with the patient's basic physiological parameters. The excised tumour tissue weighed 3 lb 1 dr (c. 1.45 kg; dr drachms; Apothecaries weight; represented by either 'ʒ' or 'ʒ'; 1 dr = 1.8 g), two hours after the procedure. Pulse reading sustained at 80 for the next two days, which gradually rose to 90, which he deems as her natural value. The patient recovered quickly and felt better than she did before the mesmeric sittings.

Johnstone offers a few conclusions in pages 11–12. We summarize them here. (1) Induced mesmerism can be so deep that the sense of feeling is annihilated, (2) such induced mesmerisms are starkly different from normal sleep and that induced by the action of narcotic drugs, (3) the person subjected to mesmeric process is more readily susceptible to an extreme state of sleep, (4) mesmerism induced sleep is the most perfect state of sleep, when intense surgical procedures

can be conducted, and (5) the excessive bleeding he encountered during the surgery did not appear to be lesser than what would have occurred in surgeries performed otherwise.

5. YOUNG'S MINUTE TO THE MADRAS MEDICAL BOARD AND FOLLOW UP

Superintending Surgeon Young participated in the surgery done by Johnstone⁹. Johnstone says that Young 'assisted' him. We reproduce below relevant section from his Minute dispatched to George Pearse, Secretary of the Madras Medical Board, Government letter # 44, dated 19 January 1847 (page 13):

I have the greatest satisfaction in submitting the enclosed statement to the Medical Board, and the subject of 'Painless Surgical Operations' under Mesmeric influence, has, since the publication of Dr. Esdaile's reports [Esdaile and his work are briefly explained in a subsequent page], excited a deep and universal interest. I would express a confident hope, that the present most triumphant illustration of the practice may be brought to the notice of the Government.

In making this request, I am impelled by a sense of justice to call the Board's especial attention to the merits of Dr. Johnstone, a private practitioner at the Presidency, by whose well-directed and unwearied skill and perseverance, the great work has been achieved for the first time in the case of an European patient in British India, or indeed in the Eastern world. Nor I can close this letter without reminding the Board that Assistant Surgeon G. Smith who so admirably seconded Dr Johnstone's efforts throughout ...

Pearse acknowledges the above Minute on 28 January 1847 (Government letter # 128), wherein he indicates that he would bring Johnstone's successful procedure to Government of Madras's attention. He appreciates Johnstone's effort (page 14):

⁹ The medical departments of the Presidencies of Madras, Bengal, and Bombay, in the 19th and early decades of the 20th centuries were minded by the Army Medical Corps. A Medical Board consisting of three most-senior surgeons, each at the rank of Colonel, made decisions. Superintending surgeons — Lieutenant Colonels — assisted by qualified surgeons at the ranks of Captain, and Assistant Surgeons at the ranks of Lieutenants reported to the Medical Board. The Medical Board reported to the Governor of the Presidency (Raman and Raman, 2017).

‘... highly creditable to that Gentleman’s (*i.e.*, Johnstone’s) professional talents and zeal in the pursuit of Science ...’

A follow-up letter from Lieutenant Colonel CA Browne (Chair, Madras Medical Board and Secretary, Military Department, Government of Madras) is available (letter # 647) dated 9 February 1847, which expresses Government’s pleasure and further interest in the matter.

A private letter from D S Young to Johnstone dated 15 February 1847 reveals that the Government of Madras had established a Committee to explore the merits of using mesmerism in surgical procedures and that Johnstone had been nominated as a member of that Committee. No further details on this Committee exist in Government records.

6. REMARKS

6.1 Excision of the Tumour

Johnstone when examining the patient observes that the tumour on the back of the shoulder was of ‘adipose nature, lobulated, mobile, and kidney shaped’ (1847, p. 5). In every likelihood this was a ‘giant lipoma’ because of its 15x10x6.5 cm size, which should have arisen from adipocytes as an encapsulated mobile mass beneath the skin. That lipomas commonly occur in the subcutaneous tissue of the head, neck, shoulders, and back is well known (Allen *et al.*, 2007). Pedoutour and Italiano (2011) clarify that adipose tumours are mesenchymal neoplasms – mostly benign – and a common form of human tumours.

Lipomas are mostly excised for aesthetic reasons. Marginal resection is the usual practice. Johnstone did this precisely in less than five minutes. Presently excisions of lipomas are followed up with histological evaluations to rule out malignancy, especially when they measure >5 cm. No explanation occurs in Johnstone’s report whether he sought a histo-pathological evaluation. In the mid-19th century, the importance of

microscopy in medical pathology was known, because of Johannes Müller’s *Über den feineren Bau und die Formen der krankhaften Geschwülste* (*On the finer details and form of abnormal tissues*) (1838). Clarity between normal and cancerous tissues existed. Surgeons were aware of the relevance of microscopic diagnosis in cancer pathology (Hajdu, 2012). Nonetheless, Johnstone’s pre-surgical diagnosis that the problem was an adipose tumour must have proved correct.

6.2 Applying Mesmerism in Surgeries

The inimitability of Johnstone’s surgery in Madras was applying mesmerism to quieten the patient into deep slumber.

John Bell’s *General and Particular Principles of Animal Electricity and Magnetism* (1792) is possibly the earliest printed record on using mesmerism in minor surgical procedures, although it includes no explicit details of either the surgical or the mesmeric procedure. Joseph Claude Anthelme Récamier (1774–1856) in Paris performed a surgery with the patient maintained under mesmeric influence (Segal, 1999). The first recorded painless surgery using mesmerism was a mastectomy performed by the French Surgeon Jules Germain Cloquet in 1829. Cloquet presented a paper on this procedure at *L’Académie Royale de Médecine* (ARM) in 1829. *L’ARM* appointed a Committee to verify Cloquet’s claim. The Committee disagreed with Cloquet (Pullman and Andrzejowski, 2013). Infrequent work using mesmerism in surgical practice did occur; however, the medical community in general was facetious of it. Elliotson resurrected this interest in Britain in 1837.

James Esdaile of the Bengal Medical Establishment (Civil Assistant Surgeon, 1830–1836; Civil Surgeon and Principal of the Hooghly College, Calcutta, 1838–1843) trialled mesmerism variously in mitigating surgical pain. He superintended the Calcutta Mesmeric Hospital (Esdaile, 1847). He published three articles on this

subject (Esdaile, 1846) and *Mesmerism in India, and its Practical Application in Surgery and Medicine* (Esdaile, 1851) (Fig. 4), the first edition of which appeared in 1846¹⁰.

Johnstone's interest in applying mesmerism in surgical procedures appears to have principally arisen out of two sources. (1) He refers to Esdaile's procedures in Calcutta done under mesmeric influence and the Report of the Committee¹¹ appointed by the Secretary to the Government of Bengal on 4 November 1846. (2) He expresses deep confidence in mesmeric practice in surgery after reading Baron Dupotet de Sennevoy's *An Introduction to Animal Magnetism* (1838). The following remark in the 'Miscellaneous' section in the *American Journal of Medical Sciences* (Anonymous, 1838, p. 507)

'animal magnetism is making significant progress in London and some highly distinguished persons of London have become converts to its verity'

is noteworthy. Johnstone reinforces in his *Notes of a Case of a Painless Surgical Operation ...* that mesmerism was taught in the medical school (*i.e.*, MMS) — with which he was not associated as an academic —, where, he indicates, students have been mesmerizing one another under the superintendence of the head surgeon. He endorses his conviction in this procedure because of the success achieved at MMS using native pupils and a few apprentices.

6.3 Fallacy in Young's Minute to the Government

However, a statement in the Minute sent by Superintending Surgeon Young to George Pearse (Secretary, Madras Medical Board) on 19 January 1847 is fallacious and regrettable. Young exaggerates as though Johnstone's work of

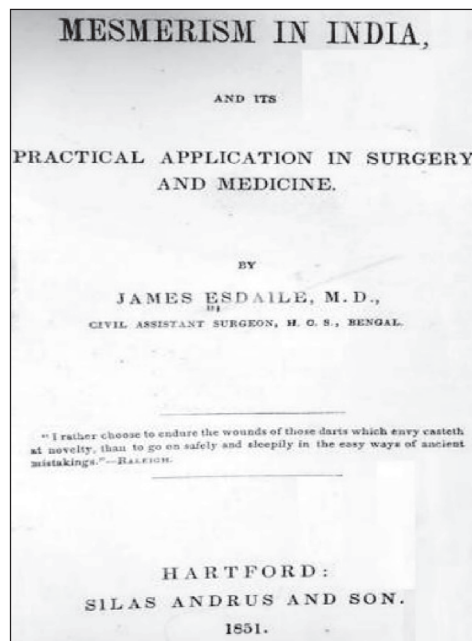


Fig. 4. James Esdaile's volume *Mesmerism in India*.

applying mesmerism on the European woman before and during the excision of the tumour in Madras as pioneering: see 'first time ...' 'or indeed in the Eastern world' (refer to the quoted passages from his Minute in section 4 of the present article), is nothing short of prejudice and hype. Esdaile in Calcutta had preceded Johnstone in performing multiple procedures, retaining patients under mesmeric influence (Esdaile, 1846). Johnstone himself acknowledges this in his notes (Johnstone, 1847). Pity that a senior medical officer of the Madras Army could make such a flippant statement.

7. CONCLUSION

The present article journeys into a novelty tried by a private-medical practitioner Joseph Johnstone in Madras in 1847. The term 'novelty' refers to not using inhalant anaesthetics (ether or

¹⁰ A brief, but hypercritical, notice of 1846 edition of Esdaile's volume is available in *The Medico-Chirurgical Review and Journal of Practical Medicine* (New York), 1846, 49, 558-559.

¹¹ The Committee included the following members, referred as 'Visitors': R M M Thomson (Surgeon and Member of the Agricultural Society of India), D. Stewart (Bengal Presidency Surgeon), J Jackson (Surgeon, Bengal Medical Service), F J Mouat (Deputy Inspector-General of Hospitals), and R O'Shaughnessy (Bengal Army Surgeon, Professor of Surgery & Medicine, Calcutta Medical College).

chloroform; the use of chloroform was discovered by James Simpson of Edinburgh in 1847, with whom Joseph Johnstone trained before he left for Madras; Simpson, 1990) to bring the patient to a 'painless' state. Instead, Johnstone placed the European patient under mesmeric influence before excision and maintained that during the surgery. According to Johnstone, the female patient experienced no pain. The surprising and strange elements are that Johnstone was convinced of a practice, which was disparaged and belittled by many of his European contemporaries. Yet, he tried it and announced it in a publication.

At the start of his report Johnstone (1847, p. 1) mentions,

'If there had been a Medical Journal published at Madras, I should have requested insertion for the following case; but there is not ...'.

True. The *Madras Quarterly Medical Journal* existed from 1839 to 1844. The *Madras Quarterly Journal of Medical Science (MQJMS)* started in 1860. A gap existed in medical journalism in Madras between 1845 and 1860. However, the Medical & Physical Society of Calcutta published the *Transactions of the Medical & Physical Society of Calcutta (TMPSC)* from 1839, which principally published medical articles and was in action in the 1840s (Raman, 2010). Why Johnstone did not prefer publishing his work in *TMPSC* remains a question.

An interesting effort was made by Johnstone in Madras, inspired by Esdaile in Calcutta and Dupotet de Sennevoy in London. Today a majority of practising surgeons reject mesmerism (or its derivative, hypnosis) in procedures. However, casual conversations with a few practising surgeons in India revealed that a few Indian surgeons in the 1980s and 1990s have tried mesmerism (or hypnotism) in surgeries (e.g., tooth extractions, trepanation). Our efforts to locate details of such surgeries in professional journals were in vain.

American psychiatrist David Spiegel (2007) (Stanford University School of Medicine, California) proposes a state of mind, which he describes as 'suspension of disbelief' can influence the mind and body. He avers that altering perception using hypnosis results in brain changes that reduces pain perception. He argues that a valid neurophysiological reason exists to accept that hypnosis is a powerful tool to alter perception of pain and associated anxiety. May be that Spiegel's comment requires some rethinking and reconsideration?

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