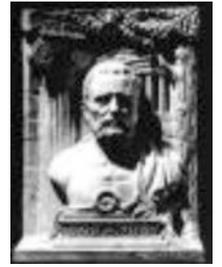


## A BRIEF HISTORY OF PAIN RELIEF IN LABOUR

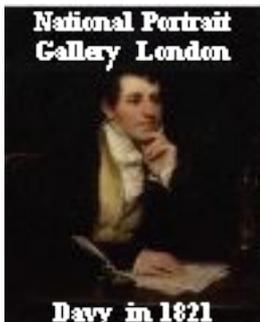
Pain management from the time of recorded history had been crude and largely ineffective. Primitive attempts to help relieve pain were based mainly on suggestion and distraction. The former embraced the use of rings, necklaces, amulets and other magical charms; while the latter included counter-stimulation i.e. the infliction of a painful stimulus sufficient to detract from a natural one. One of the earliest references to the management of childbirth pain appeared in a gynecologic text written in the first century C.E. by the Greek physician Soranus of Ephesus. He suggested that the physician "*soothe the pains (by) touching with warm hands and afterwards drench pieces of cloth with warm, sweet olive oil and put them over the abdomen as well as the labia and keep them saturated with the warm oil for some time, and one must also place bladders filled with warm oil alongside.*"



In the Middle Ages various herbal concoctions based on extract of poppy, mandragora, henbane and hemp were introduced. There is evidence that alcohol was also used in labour.

Around the year 1700, Cotton Mather (1663-1728), who was a Puritan minister but also well-versed in medicine, advised women to use potions such as the "*livers and galls of Eeles, dried slowly in an Oven,*" or "*Date, Stone, Amber and Cumin seeds.*"

Even in the first decades of the 19th century, American physician and statesman Benjamin Rush still recommended bleeding. Rush reasoned that the pain of childbirth stimulated a woman's central nervous system to the point of causing serious side effects. In accordance with accepted medical theory of his time, Rush recommended copious bleeding, as many as three or more pints of blood. This was thought to depress the nervous system and thereby counteract the danger from the pain.



National Portrait Gallery London

Davy in 1821

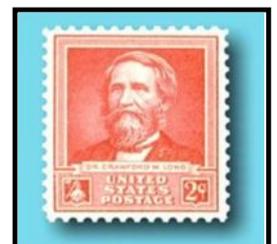
Sir Humphry Davy (1778-1829) a famous English Chemist, having discovered the anaesthetic properties of Nitrous oxide in 1799 by experimenting with himself and colleagues did not realise its potential. He "breathed 16 quarts of the gas in seven minutes" and became "completely intoxicated" with it. It would be forty-five years later before nitrous oxide would be used as an anesthetic by dentists.



In this caricature by James Gillray, a young Davy works the bellows demonstrating his experiments with N<sub>2</sub>O or laughing gas.



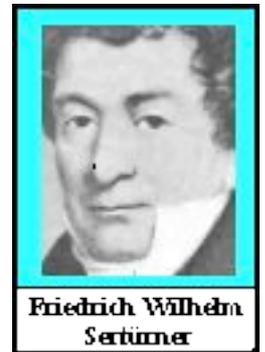
An American Physician Dr Crawford Long (1815-1878) who in 1839 had graduated in Medicine from the University in Pennsylvania, returned home to take over a rural practice. As a student, he had engaged in "ether frolics" and thought there was some possibility of the development of an anesthetic to lessen or remove the extreme pain surgery patients of his time had to endure. He did not have access to the nitrous



Commemorative Stamp USA 1940

oxide that had been used in his college experiences, so he began experimenting with sulfuric ether. Careful observation showed him that patients suffered no pain when under the effects of this gas, even when severely cut or bruised. Long took the inevitable next step on March 30, 1842. His patient James M. Venable was rendered unconscious by sulfuric ether, then had a cyst removed. [See photo of re-enactment.] When Venable regained consciousness, he felt no pain at all! Because Crawford Long did not write up his findings until 1849, William Morton is credited with the discovery of Ether Anaesthesia for its use in Dentistry in 1846.

Better methods for pain relief existed even during these early times. For centuries, physicians had administered opium. After 1809, when the German pharmacist Friedrich Wilhelm Sertürner (1783-1841) isolated some of opium's active principles, they had "morphium."



Medical history abounds with episodes where new treatments have been embraced with well-intended but misplaced enthusiasm. The introduction of anaesthesia and pain relief in childbirth in the nineteenth and early twentieth centuries was no exception and some practitioners were so seduced with the powerful effects of the new drugs available to them (chloroform, opioids), that they used them indiscriminately. During the 18th and early 19th centuries, because of the indiscriminate use of these drugs, many physicians had been reluctant to use either opium or morphine for labor. They believed that either compound diminished uterine contractions and depressed the child and, therefore, constituted an unacceptable risk for normal labor. Later, in 1847, physicians used the same arguments against the use of ether or chloroform to treat the pain of childbirth.

In 1847, after initial reports of successful pain free childbirth, an era of conflict began predominantly between two groups. One against and the other for 'adapting pain-free childbirth'. The former were based largely on scriptures **and** Labor has been portrayed as a painful, life-threatening and fearsome event since the earliest recorded history and has held that status until the last century. According to Scripture, childbirth pain originated when God punished Eve and her descendants for Eve's disobedience in the Garden of Eden. They believed that it was wrong to avoid the pain of divine punishment.

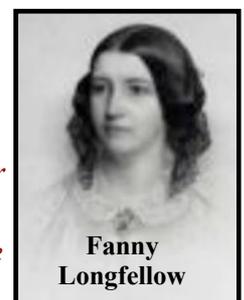
In this context, it has to be recorded that Agnes Sampson, of Edinburgh Scotland, was burned at the stake for attempting to relieve the pains of labour. A widow and midwife, she was possibly Scotlands 1st witch and a threat to the throne of King James VI. <sup>1</sup>



When the anesthetic effects of these drugs were discovered in the mid 1800's, many members of the British clergy argued that this human intervention in the miracle of birth was a sin against the will of God. If God had wished labor to be painless, he would have created it so. Even some of the physicians of the time were divided in this issue. It should be remembered that during the 19th century and before, the Clergy in both Britain and Europe were a powerful group within society. However, the 19th and 20th centuries saw a gradual erosion of their power and scientific discovery allowed to prosper.

The other group were the pioneering physicians who discovered the value of ether and chloroform in childbirth and despite the resistance of the powerful clergy of the time, these doctors were driven by the enthusiasm expressed by early obstetric patients who welcomed its introduction. In particular, there were three famous women of the time who were known to be very enthusiastic about its use.

The first woman anesthetized for childbirth in the United States was Fanny Longfellow in 1847 for her third child. She was the wife of the American poet Henry Wadsworth Longfellow who actually administered the ether. She later wrote the following. *"I did it for the good of women everywhere as no woman should have to suffer that much pain. I am very sorry you all thought me so rash and naughty in trying the ether. Henry's faith gave me courage and I had heard such a thing had succeeded in abroad where the surgeons extend this great blessing more boldly and universally than our timid doctors.... This is certainly the greatest blessing of this age."*



The second woman who was to become famous was Emma Darwin, the wife of Charles Darwin the eminent 19th century Naturalist. Emma had chloroform given to her by her husband for the last 2 of her 8 births. The first time she used chloroform was in 1847 which was before Queen Victoria (1853) and no doubt it left an indelible impression upon her so much so that for her last birth she was screaming 'Get me the chloroform'.



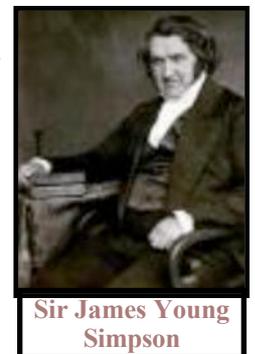
<sup>1</sup> Lurie S. Euphemia Maclean, Agnes Sampson, and pain relief during labour in 16th century Edinburgh. *Anaesthesia* 2004;59:834-835.

The third, who was not only the most famous of them all, but the most influential, was Queen Victoria who in 1853, undaunted by the clergy and with the strong encouragement of her husband Prince Albert, convinced her reluctant physicians, to have chloroform administered to her by Dr. John Snow for her 8th confinement of Prince Leopold.<sup>2</sup> Dr. Snow wrote afterwards, *“her Majesty expressed great relief from the application, the pains being trifling during the uterine contractions, and whilst between the periods of contraction there was complete ease”*. Queen Victoria’s enthusiastic endorsement of Chloroform subsequently popularised its use. Indeed, for her 9th and last confinement of her daughter Princess Beatrice, Dr. Snow administered the Chloroform again.



What did these 3 famous women have in common? They had **all** experienced childbirth several times before with **no pain relief** and when it was offered to them for the first time, they welcomed and endorsed it with open arms. Women are **no** different today and popular women’s magazines which discourage pain relief in the name of *“intervention”* or make their clients feel *“guilty”* or *“weaklings”* if they accept pain relief do their clients a great disservice.

The first to use Ether and Chloroform for pain relief in labour in the United Kingdom was the eminent Scottish Obstetrician Sir James Young Simpson, Professor of Midwifery at the University of Edinburgh. On January 19, 1847 he administered ether to an obstetric patient and thus began a new era in the effective management of pain in childbirth. He prophesied the role of public opinion in the acceptance of obstetric anaesthesia, a fact not lost on his adversaries. Simpson humorously responded that on the occasion of the first recorded operation –the removal of a rib – the Lord had caused a deep sleep to fall on Adam, proof of his approval of anesthesia! In defending anesthesia against clerical criticism, Simpson noted that some churchmen also first spoke against optical glasses, spectacles and the telescope as ‘offsprings of man’s wicked mind’, because they changed the natural appearance of things and presented them in an untrue light. Simpson was so convinced of the rightness of anesthetics that he even called his study ‘St. Anesthesia’.



Early in the controversy he also wrote

*“Medical men may oppose for a time the superinduction of anaesthesia in parturition, but they will oppose it in vain; for certainly our patients themselves will force use of it upon the profession. The whole question is, even now, one merely of time.”*

Such a prophesy is no less true today than when Sir James Simpson made this prophesy. However, even in the years that followed, the era of 'obstetric anesthesia' began to flourish as the ship entered clear waters from the initial turbulent seas. A change in public attitude in favor of obstetric anesthesia marked the culmination of a more general change in social attitudes that had been developing over several centuries. Anaesthetics were subsequently used increasingly for labor pain, and the concurrent drop in mortality and morbidity in both mother and infant were attributed, in part at least, to the absence of pain which permitted the midwife or obstetrician to work unhindered in difficult labors.

In the last 50 years in particular, *“unrelenting hard work and dedication from several researchers, physicians, pharmaceutical organizations, and professional societies in the last century have resulted in making obstetric anesthesia provide a safe alternative to pregnant women seeking pain-free childbirth in this century, and making their birthing experience a pleasurable memory to be cherished for a long time.”*

Bhavani Shankar Kodali MD Associate Professor, Harvard Medical School.

<sup>2</sup> May 14, 1853. The influential medical journal, *The Lancet*, criticized Dr. Snow (but not by name) and Queen Victoria's physicians for using chloroform during the birth of Prince Leopold.

Today, the American College of Obstetrics and Gynecology endorses their view on this subject as follows.

*"Labor results in severe pain for many women. There is no other circumstance where it is considered acceptable for a person to experience severe pain, amenable to safe intervention, while under a physician's care. **Maternal request is a sufficient justification for pain relief during labor.**"*

Finally, unlike their predecessors who had **no** choice, it can be stated that today's women are fortunate in being empowered to have a choice. They should strongly resist being influenced by their peers either directly or indirectly. Whether or not they have pain relief in labour **is their call** and **only their call** in the majority of circumstances although there are some medical indications. They can also be reassured by the fact that the most effective pain relief available is the epidural and it is safe.

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