



Pox Sussexiensis Orientem

Drs Thomas Frewen and Giles Watts; Mrs Cordelia Murray (née Collier) and Rev. John Wesley –

A brief history of early attempts to eradicate smallpox in Eastern Sussex during the 18th century

BACKGROUND

Smallpox was a terrible disease with a high mortality rate, particularly in children. First descriptions of it come from as early as the sixth century. Bishop Gregory of Tours described smallpox when he wrote of '*Lues cum vesicis*' (epidemic with vesicular eruption) in 582. Irish manuscripts contain notices of '*Bolgach*'¹ in the 7th and 8th centuries. An Anglo-Saxon prayer reads '*geskyldath me vid de iathan poccas*' (shield me against the hideous pocks).

Chinese, Indian, Arabian then European physicians gradually recognised the disease as highly contagious and various outlandish 'explanations' and 'cures' get described. But from very early times the critical observation had been made that people who survived smallpox became immune to re-infection. Survivors were often recruited to help care for those who had caught disease, their immunity being recognised but not necessarily understood.

In the Middle East, Asia, and North Africa it was found that inoculation with a mild dose of smallpox to produce a mild infection (whilst not without a small degree of hazard) worked in preventing severe infection and death. Some very considerable time later this was also recognised in Western Europe.

In 1714 'The Philosophical Transactions of the Royal Society' had contained letters from Dr Jacob Pylarini and Dr Emanuele Timoni of Constantinople (now Istanbul, Turkey) to the Royal Society of London describing inoculation, and stating that the Circassians² had introduced the practice about 40 years previously into Constantinople, and that now severe cases of smallpox were rare. Greek women inoculated matter from an early vesicle, or blister, of an infected individual. The practice of inoculation (or variolation) which entailed making a small skin wound and introducing a tiny quantity of pus from a vesicle of someone who had caught smallpox therefore certainly existed and it is likely that inoculation had been practiced in Africa, India, and China long before the seventeenth century. British doctors of the time showed little interest, probably wary of risking their 'reputations' on such a 'foreign and unconventional idea.'

Lady Mary Wortley Montagu (1689–1762) who had been disfigured by smallpox, and whose brother had died from the disease, lived in Turkey with her husband, the British ambassador, and heard of the practice. There, Lady Montagu first witnessed

¹ Smallpox, see <https://www.teanglann.ie/en/> an online English-Irish dictionary

² A small indigenous group in the North Caucasus



inoculation, in 1716, and subsequently had her son inoculated. There is an excellent online paper about this story by Salah Zaimche and Salim Al-Hassani³.



Lady Mary Wortley Montagu with her son, Edward Wortley Montagu, and attendants

attributed to Jean Baptiste Vanmour

Oil on canvas, circa 1717
27 1/4 in. x 35 3/4 in.
(693 mm x 909 mm)
Purchased, 1958
3924.

National Portrait Gallery, London

Two years later, back in England, Lady Montagu had her daughter inoculated during a smallpox epidemic, under the scrutiny of Dr Charles Maitland and the Royal Society and the Royal College of Physicians. The inoculation was a success – the girl had a few lesions but only very mild symptoms.

Encouraged by this, in a larger experiment that would today be highly unethical, inoculation with smallpox was carried out on six prisoners in Newgate prison who had been condemned to death, all of whom were promised indemnity if they survived. They all happily took part and were later pardoned and released. Then the physicians moved on to their next guinea pigs and inoculated orphans in poorhouses with such success that the Princess of Wales was confident enough to have her own two children inoculated. With royal blessing inoculation started to be accepted.

Techniques obviously varied and there were some deaths after inoculation but only at a very low rate. However, some of the adjunctive aggressive treatments by overzealous doctors, such as bleeding, laxatives, use of substances to make their patients sick both before and after inoculation and the use of others such as cinnabar (mercuric sulphide!) afterwards at the slightest appearance of a vesicle, no doubt contributed to the fortunately few deaths. Although Dr Thomas Frewen (of Northiam, Sussex) at first went along with such practices, by 1759 he was writing virulently against them. In this he was joined by Dr Giles Watts (of Battle, Sussex) who also wrote a treatise in 1768. By 1770 a routine had been established for inoculation and care which was 'best practice' as it would be called today.

³ <https://muslimheritage.com/lady-montagu-smallpox-inoculation-england/>



Doctors often displayed an active interest in forwarding their profession and improving the lot of the patient. They would have subscribed to, and sometimes contributed to, the journals that circulated among them, and in the process learnt of new opportunities and new dangers. The local story of this and events involving Drs Thomas Frewen and Giles Watts, Mrs Cordelia Murray and Rev. John Wesley are described below.

DRAMATIS PERSONAE

Dr Thomas Frewen (1704-1791) of Northiam and Rye, was the son of Thankfull Frewen, the brother of Accepted Frewen, Archbishop of York⁴. He was one of the first in England to practice inoculation against smallpox, and must have set up a private inoculation establishment in his house, Farthings House⁵ in Northiam, very early on. People wishing to be inoculated were prepared for the experience and nursed afterwards during the period they would have been able to infect others. He also cared for those with smallpox, and he shared his experiences and ideas in publications.

Dr Giles Watts⁶, (1725-92) practiced in Battle from at least 1753 and took a great interest in Dr Frewen's activities. Although he had a fierce falling out with Frewen over an unrelated issue, he subsequently supported Frewen's ideas about the care of inoculated patients in a later paper, and inoculated many in the Battle area.

Both Frewen and Watts qualified at Leiden in the Netherlands (Watts doing so in 1752), and for local doctors were clearly well-qualified.

Mrs Cordelia Murray (née Collier) had married the then Captain James Murray⁷ in December 1748. She developed smallpox in the following April and reported going to Dr Frewen at Northiam for 'some months' in 1749. Her parents, John and Mary Collier, then decided to have their other four daughters inoculated by Frewen, two in January 1750 and the others in April 1750 (sometime previously their brother, Jacky, had died from smallpox). They would have been an example to many in this area. Cordelia, it seems, remained in frail health for the rest of her life and was possibly badly scarred. She and James Murray had no children and she would try to avoid going with him to overseas postings⁸. She never went to Canada. In the end she joined him in 1774 when he was appointed Governor of Minorca, caught malaria there in early 1779 and, although she made it back to Beauport Park, she died just two months later.

Rev. John Wesley whilst preaching in Sussex went out of his way to visit Dr Frewen to gather information about the techniques and discuss religious conflicts and concerns involved with inoculations. The new treatment had caused considerable excitement in the neighbourhood and much opposition from the clergy, saying

⁴ See the author's paper 'Accepted Frewen of York (1588-1664)' as F3.4 in BDHS' Collectanea Section F <https://battlehistorysociety.com/fdarkyellow/>

⁵ On Main Street, Grade II listed

⁶ See George Kiloh's 'The Physicians of Battle to 1945' at <https://battlehistorysociety.com/Documents/D01.pdf>

⁷ To become Governor of Quebec and General the Hon. James Murray of Beauport Park, Battle

⁸ See <https://battlehistorysociety.com/Documents/J03.pdf> for a history of James Murray and their life.



inoculation conflicted with proper Christian behaviour. Wesley was interested in this controversy as he felt it was his duty not only to minister to the needs of the souls of the people but also to provide remedies for the ills of their bodies. For this purpose in 1747 he organised dispensaries, where medical treatment could be obtained by the poor and at the same time he published his *Primitive Physic*, containing sensible remedies for some illnesses. He would have been a natural ally for Dr Frewen.

LOCAL ACTION

Many statistics were collected, for example those from the first three decades of the 1700's in London, where deaths from smallpox were 1 in 12 of total deaths, and as much as 1 in 3 of total deaths in young children. This was reflected across the country. Frewen, who clearly took a great interest in the subject wrote to the Philosophical Society in January 1731 concerning an outbreak of smallpox in Hastings in 1730⁹. Hastings' total population at that time was 1,636, of whom 705 contracted smallpox, from which 97 (1 in 7) died.

Frewen's reports include some collected figures from around the country between 1721 and 1728, just after the practice of inoculation had been introduced in Britain: of 897 persons inoculated 843 had mild smallpox after inoculation, 13 had more serious smallpox but survived and 17 died (1.8%). The inoculation appeared to have had no effect on 24 (they had probably previously had very mild smallpox and therefore already had natural anti-bodies, not that antibodies were known of or understood at that time).

The 1.8% of deaths were of course seized upon by the religious and medical opponents of inoculation and subsequent scare reporting reduced the uptake of inoculation. Interestingly John Wesley, having a keen interest in medical science and how it could improve people's health, and a rational approach to such issues, when visiting the area in 1758 took the trouble to seek out Dr Frewen for a discussion of the prominent religious preaching that had taken against inoculation by that time. This was a significant dispute about the religious lawfulness of propagating diseases, which of course was the basis of smallpox inoculation. This visit was probably arranged by Frewen's local colleague Dr John Stonestreet, an ardent Methodist, who lived and practiced at Perryman's Cross¹⁰, Northiam.

Here it should be pointed out that inoculation was more risky than later vaccination. Inoculation involved using fluid from pustules of smallpox taken from a sufferer and introducing it to a small wound. Ideally this caused only a mild case of smallpox, during which the recipient of the inoculation was cared for in a degree of isolation. Frewen himself noted that the same effect could be obtained with tiny doses of inoculant, including that just using the serous fluid from healing vesicles. It is likely that some other inoculators were rather heavy-handed with dosing and technique, and put their clients at excess risk.

⁹ A letter to Dr Jurin, FRS, giving an Account of the Condition of the Town of Hastings, after it had been visited by the Small Pox'

¹⁰ Grade II listed



By the end of the eighteenth century, there were many well-practised practitioners of inoculation in Europe, and this skill-base considerably decreased morbidity and mortality. In addition, the concept of improved post-inoculation care to prevent the spread of disease helped to facilitate the subsequent adoption of vaccination. Watts was a keen later advocate of inoculation and authored a small book about the technique and care of patients, notably defending proponents of keeping patients cool and in an airy room, and not 'the sweating treatment' that had been so common. In 1755 He wrote a letter to Frewen about blood-letting, but unfortunately, he and Frewen fell out with each other that year, not over an argument about smallpox, but over the care of a patient who was both alcoholic and had had a near fatal stroke. Reading between the lines of the vitriolic correspondence, Watts wished to be aggressive with his bleeding treatments and Frewen felt that the patient should be allowed to die in peace.

Thomas Frewen in his essay on '*The Practice and Theory of Inoculation with an Account of its success*' includes reports of 350 cases of people inoculated, only one having died by the smallpox so induced. That very low mortality rate of 0.2% would be an indication that he was a keen observer, flexible enough to modify his treatments and give minimal amounts of inoculant. The preface to his book of 1749 is interesting: It says, 'The art of inoculating the small-pox ever since Mr. Maitland introduced it (in 1721) has been praised, more or less, in many parts of this kingdom, but for many years, like other modes and fashions, has met with approbation or dislike from the prevalence of either caprice or fashion, without attributing merit or demerit to its success or failing. And from some of the clergy at first, as well as the physicians, were drawn into parties on occasion, some from approving and others disapproving the new practice.'

EPILOGUE

A finding has been reported by Edmund Austen¹¹ in 1926 concerning Thomas Frewen's house. He noted that during renovation of the old Farthing's house, a hidden window in a large front room was brought to light. On the window-sill, several patients had written their names in pencil, giving their addresses and the dates of their inoculation, ranging between 1760 and 1763, and they also added other remarks, but he fails to record these!

It is interesting to realise that in fact inoculation was not widely practised – although it was popular amongst the middle and upper classes they were a small minority. It thus had, at best, an overall marginal effect on general population mortality. This was because it was relatively expensive to perform and provide safe convalescence for. There was, later, some provision via the Poor Laws mainly in country towns, but not so much in cities. In Rye by 1762 places were set aside in a new 'pest-house for the inoculated poor'. We do not know the situation in Battle, but it appears to have been behind the curve. The local church vestry (then the only council the town had) declared in 1796 that everyone should be inoculated against smallpox.

¹¹ Edmund Austen wrote 'Brede, the Story of a Sussex Parish' (1946), but earlier he also authored several papers for the Wesleyan Methodist Society. The story comes from 'John Wesley, Dr Stonestreet and early Methodism in Northiam, East Sussex' *Proc. WHS Vol.15 169-173* (1926)



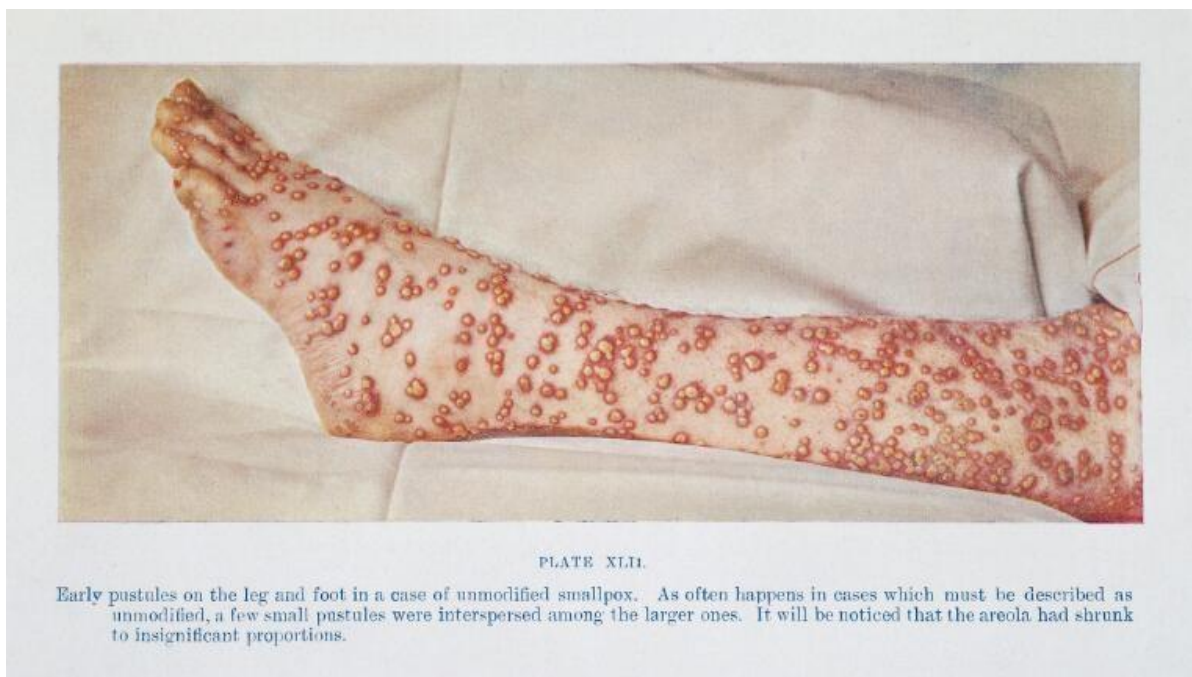
The later very safe vaccination technique finally introduced right at the end of the 18th century used cowpox virus, it having been observed that milkmaids who had a mild infection with cowpox were immune to smallpox as well. In Europe this was a very late observation, as it has been described that some Indian shepherds were convinced of the protective effect of cowpox '...since the earliest recollection of man.'

In England in 1774 a Dorset dairy farmer, Benjamin Jesty, had the observational intellect and confidence to vaccinate his two sons and wife with cowpox: it worked, but it was not until 22 years later, on 14th May 1796, that Dr Edward Jenner performed his first vaccination: and the rest is history.

If only communications and receptiveness of foreign and folk ideas had been better in the past many millions of humans could have been spared from both the scourge of smallpox and the dangers of inoculation. Vaccination did not immediately supersede inoculation. Some less well informed or intentioned doctors inevitably campaigned against the new procedure and the poor in country towns were reluctant to give up inoculation, which had proved such a success in controlling smallpox, but it was eventually prohibited by Act of Parliament in The Vaccination Act 1840.

Today smallpox has been eliminated worldwide. It is pleasing to have been able to report the early practice in our area that helped in a small way to move us to this happy position, despite ignoring folk practice in other cultures and countries, and barriers being placed by the ignorance of some British doctors, religious opposition, and general naysayers in the 18th and 19th centuries.

Keith Foord, May 2022
Edited by Neil Clephane – Cameron
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Early pustules of smallpox – It could look a lot worse!
Credit: Wellcome Collection. Attribution 4.0 International (CC BY 4.0)



General References

The reader should note that the texts of Drs. Frewen and Watts are extremely wordy. Most of the old texts are available via archive.org or google books.

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