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At the end of 1760, the political authorities in Geneva were preoccupied by a threatening epidemic of venereal disease. Doctors and surgeons had been alerted to this possibility having seen a few women who had contracted venereal disease after contact with a 'mother sucker'. Mother suckers were women paid to suck the breasts of women who had recently given birth and who did not want to (or could not) breastfeed their babies. It was believed that emptying the breast was required to stop lactation and that accumulating excess milk could be deleterious for a young mother's health. Medical as well as lay people believed that health resulted from a proper balance of the body's circulating humors, and between what entered and left the body.[1]

The city authorities were concerned that the resources of the Geneva Hospital would become overwhelmed by the epidemic and they asked the surgeons and physicians to examine all the mother suckers, and to inform new mothers of the danger of contamination. They also directed the doctors to discuss how best to cure venereal diseases. It was widely believed that mercury cured syphilis specifically (even though the mechanism of action was unknown), but it was prescribed in different ways. All but one of the doctors supported using it in the traditional way, which involved rubbing all or some of the body with a mercurial ointment daily for about 40 days, in hospital. This was a cumbersome and stigmatizing treatment for patients, who naturally had difficulty in hiding the nature of their affliction.

An alternative to this traditional treatment was the use of proprietary pills containing a combination of mercuric oxide and acetic acid, which had been marketed by a French military surgeon, Jean Keyser. Keyser pills sometimes had quite strong side effects, such as violent vomiting, but they had been used in French military hospitals, and their use was supported by several 'persons of noble birth'. One of the surgeons at the Geneva Hospital—Daniel Guyot—had tried the pills previously and judged them successful, so he proposed that they should be used to deal with the situation in Geneva. Moreover, Guyot claimed that the rubbing method was not easy to apply and only successful if the ointment was prepared following a specific protocol, which he doubted was happening in Geneva.

THE CLINICAL TRIAL

The physicians of the hospital, who were hierarchically above Guyot and other surgeons, proposed that both methods should be tried.[2] The hospital authorities endorsed this proposal and directed Guyot to supervise the process, albeit under the control of the physicians.

> *'But . . . the use of these pills is a quicker and more convenient remedy; that the Physicians thus believed that there is no inconvenience to conduct a trial of the two methods in order to determine from experience which works the better. On the basis of this opinion, the instruction was to endorse the decision of the Physicians, and indeed to conduct a trial of the two methods, for which Mr Guyot, surgeon, would remain in charge in this institution, under the supervision, however, and assiduous control, of the Physicians of the Hospital.'*[2]

The outcome of the two treatments was reported 10 months later:

> *'The hospital administrator has produced here the result submitted to him by Mr Guyot, surgeon, of the patients with venereal disease whom he has treated during the current year, which demonstrates that he has treated 12 by rubbing with ointments . . . and 12 with Keyser pills . . . altogether 24 patients, 23 of whom have been cured . . .*
>
> *One woman patient . . . had failed to respond to rubbings; and another, Matthey, also failed to respond to rubbings, but was subsequently cured by Keyser pills. The hospital's physicians examined 8 of the patients treated with the pills and confirmed that they had been cured.'*[2]

DISCUSSION

Although we know that the trial was completed, we do not have any details of how it was conducted. For example,

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there is no description of how the patients were recruited to the study, how they became infected, or how they were allocated to the alternative treatments. It is possible that the trial was open to all infected patients, as a way to supervise their treatment, both to ensure their cure and to control the epidemic. Nothing appears in the registers of the hospital, and the archives do not include any of Guyot's notebooks. We also know that, following that trial, Keyser pills were considered a good treatment. Their popularity did not last for long, however, because some years later, they disappeared from the list of prescribed drugs at the Geneva Hospital, as elsewhere.[3,4]

This comparison of two different ways of administering mercury to patients with venereal disease in Geneva in 1761 seems to have resulted from the convergence of several general and specific factors. The general factors were, first, that the disease could be diagnosed unequivocally, and everyone agreed that mercury was a specific treatment for it, even though opinions differed on the way the mercury should be administered. Second, as venereal diseases had become the focus of a large range of mercury prescriptions by the middle of the 18th century, these formulations provided business opportunities for many different kinds of practitioners. Keyser's claims had been endorsed by members of the nobility who testified that hundreds of military patients had been completely cured by his pills.

The specific factors were, first, that the sudden increase of patients with venereal disease in Geneva had forced the directors of the hospital to stop the transmission of the disease in the population using less expensive treatments, which were easier to administer than the traditional, prolonged treatments using of whole body ointments in hospital. Therapeutic institutions had financial difficulties at the time, and the epidemic was going to require more hospital space at additional cost. Second, the style of management of the Geneva Hospital promoted a search for new treatments. Although the directors were not physicians, they were deeply interested in and keen on medical culture, and were well-informed about what was happening elsewhere, including the developments in Britain.

Finally, Daniel Guyot was clearly a progressive surgeon. He had returned to Geneva after training in Paris, and had been the first in the city to use both inoculation against smallpox and electric treatments. The numerous books in his private library indicate that he had an innovative and inquiring mind extending beyond the field of surgery. The importance of this should not be underestimated in a small institution such as the Geneva Hospital. In that context, as long as he was supported by the administrative authorities, an innovative individual like Guyot could promote progressive changes. It is of note that Guyot left his position at the Geneva Hospital in 1763, and that no other such trial took place there during the subsequent 60 years.[5]

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