

# The Scurvy Scandal at Millbank Penitentiary: A Reassessment

PETER McRORIE HIGGINS\*

Historical myths die hard: one such is of a supposed outbreak of scurvy—said by some to be the result of medical insouciance—at Millbank penitentiary in 1823. Thus, Sean McConville in his masterly account of prisons in the reform period writes: “The decision [to reduce the diet] was a major factor in the scurvy epidemic which followed shortly afterwards, causing at least thirty deaths”.<sup>1</sup> Other authors take a similar line: “Fifteen months later, after 30 had died, and after the whole convict population had been evacuated from the prison, Holford was convinced that the disease had been sea-scurvy”;<sup>2</sup> “there was a serious outbreak of scurvy not long after the new diet was adopted”;<sup>3</sup> “In the winter of 1823, the inmates began to succumb to typhus, dysentery, and scurvy. Thirty-one died and four hundred others were incapacitated”;<sup>4</sup> “The scurvy was the prevailing disease, and was seen in over half of the 860 inmates”.<sup>5</sup> Joe Sim in his generally condemnatory evaluation of medical staff working in prisons states: “Millbank was at the centre of a major controversy when an outbreak of scurvy occurred and thirty-one prisoners died. The [Prison Medical Service] was deeply implicated”, and he goes on to associate the physician in charge with “experiments” on the bodies and minds of the confined.<sup>6</sup>

The myth’s origin is easy to trace—a six-page report produced by two physicians, Dr P M Latham<sup>7</sup> and Dr P M Roget,<sup>8</sup> summoned on 28 February 1823 to enquire into the nature of an alarming increase in disease and deaths in the prison. The report in question (5 April 1823) states: “We found the prevailing disease to be the same with that which is known by the name of *Sea Scurvy* . . . Conjoined with the scurvy, in almost every case, there was diarrhoea or dysentery”, and: “we found more than one half of the whole number of

© Peter McRorie Higgins 2006

\* Peter McRorie Higgins, MCh, PhD, FRCS, 41 Frenchay Road, Oxford, OX2 6TF, UK.

I wish to thank Dr Stephen Morris-Jones, MRCP, MRC Path, DTM & H, consultant in infectious diseases and microbiology at University College Hospitals Trust, London, and Shelagh Willits, FHCIMA for their very helpful advice on infectious disease and dietary respectively. Dr Debbie Brunton of the Open University provided invaluable guidance and encouragement. Travelling expenses in connection with research were partly funded by a grant from the Wellcome Trust.

<sup>1</sup> Sean McConville, *A history of English prison administration*, London, Routledge & Kegan Paul, 1981, pp. 144–5.

<sup>2</sup> Robin Evans, *The fabrication of virtue: English prison architecture, 1750–1840*, Cambridge University Press, 1982, p. 249.

<sup>3</sup> Charles Campbell, *The intolerable hulks: British shipboard confinement 1776–1857*, Bowie, MD, Heritage, 1994, p. 99.

<sup>4</sup> Michael Ignatieff, *A just measure of pain: the penitentiary in the industrial revolution, 1750–1850*, Harmondsworth, Penguin, 1989, p. 176.

<sup>5</sup> Kenneth J Carpenter, *The history of scurvy and vitamin C*, Cambridge University Press, 1986, p. 99.

<sup>6</sup> Joe Sim, *Medical power in prisons: the prison medical service in England, 1774–1989*, Milton Keynes, Open University Press, 1990, pp. 17–18.

<sup>7</sup> Later to become Physician Extraordinary to Queen Victoria.

<sup>8</sup> Of Thesaurus fame. See D L Emblen, *Peter Mark Roget: the word and the man*, London, Longman, 1970, pp. 255–85.

prisoners affected by it”.<sup>9</sup> They concluded that the problem was partly the result of cold weather, but more so the consequence of a reduction in prison diet introduced some eight months previously.<sup>10</sup>

Lengthy further inquiries (over 500 pages) into the health problems at the prison were published on 5 July 1823,<sup>11</sup> and 11 June 1824.<sup>12</sup> But it is the preliminary report which has attracted attention and on which the conclusions of modern commentators are based. This, despite Dr Latham’s later, more considered, opinion: “This Report [that dated 5 April 1823], as a medical document, was unquestionably premature, yet I candidly confess we had no such belief at the time”.<sup>13</sup> My close study of the later reports and other sources leads to the conclusion that, although there were a few cases of scurvy in the prison, this disease was not a significant factor in prisoner morbidity and mortality, and that Joe Sim’s condemnation of the doctors working in the prison is unjustified.

### Millbank Penitentiary

Those who set about the task of prison reform in last quarter of the eighteenth century were faced with a bewildering array of institutions. One of the reformers, Dr John Mason Good, did his best to sum up this gallimaufry:

In modern times, the buildings allotted for the reception of prisoners and the poor, and especially in this kingdom, are of such various forms, dimensions, materials, and situations, with strange diversities of customs and rules, that it is almost impossible to arrange them into regular and appropriate classes. In general, however, they consist of old castles, barns, or monasteries, purchased by the county or district for this purpose. Sometimes, however, they are the gift of individuals, as at SHEFFIELD, where there is a prison which was granted by the Duke of NORFOLK for the confinement of debtors; and sometimes they are still private property, and subject to an annual rent for occupation: instances of which last are to be found at the MARSHALSEA prison, which belongs to four landlords, and is farmed at one hundred guineas per year.<sup>14</sup>

John Howard closely examined conditions in over 200 of these prisons, and his reports, the first of which appeared in 1777,<sup>15</sup> together with legislation he promoted in the 1770s,<sup>16</sup> gave much impetus to the process of reform, although since any legislation at this time was only permissive, progress was patchy. However, the reformers’ efforts were not in vain, there was a spurt of building of gaols and houses of correction (the latter accommodating minor offenders) notably in Sussex and Gloucestershire.<sup>17</sup> In particular, the county gaol,

<sup>9</sup> *Report of the physicians on the state of the General Penitentiary at Millbank* [sic], PP, 1823 (256), V, 379, p. 2.

<sup>10</sup> *Ibid.*, pp. 3–5.

<sup>11</sup> *Report from the Select Committee on the state of the General Penitentiary at Millbank*, PP, 1823 (533), V, 403.

<sup>12</sup> *Report from the Select Committee appointed to inquire into the General Penitentiary at Millbank*, PP, 1824 (408), IV, 407.

<sup>13</sup> Peter Mere Latham, *An account of the disease lately prevalent at the General Penitentiary*, London, Underwood, 1825, p. 22.

<sup>14</sup> John Mason Good, *A dissertation on the diseases of prisons and poor-houses*, London, Dilly, 1795, pp. 21–2.

<sup>15</sup> John Howard, *The state of the prisons in England and Wales*, Warrington, Eyres, 1777, pp. 147–452.

<sup>16</sup> McConville, *op. cit.*, note 1 above, pp. 86–7.

<sup>17</sup> *Ibid.*, pp. 89–104.

### *The Scurvy Scandal at Millbank Penitentiary*

opened at Gloucester in 1791, accommodated penitentiary prisoners (the word penitentiary conveying the innovative ethos of penitence leading to reform) as well as debtors and those awaiting trial. Wide variations in the quality of administration and funding, the mix of categories of prisoner and the difficulty of providing suitable work, meant that the reformers' lofty aims were rarely achieved. An alternative approach, with similar aims regarding the health of prisoners and their reform, gave birth to the Penitentiary Act of 1779 in which was authorized the building of two national prisons (one for males, one for females).<sup>18</sup> These were to be under the direct control of parliament, a state of affairs not achieved as regards the generality of prisons until the second half of the nineteenth century. The new prisons were to be infused with clear and effective reformatory objectives:

... by sobriety, cleanliness and medical assistance, by a regular series of labour, by solitary confinement during the intervals of work, and by due religious instruction, to preserve and amend the health of the unhappy offenders, to inure them to habits of industry, to guard them from pernicious company, to accustom them to serious reflection, and to teach them both of principles and practice of every Christian and moral duty.<sup>19</sup>

So far as the national penitentiary project was concerned, for many years expediency triumphed over idealism. The use of prison hulks and transportation to the Antipodes as more opportune solutions to the disposal of large numbers of convicts, together with problems regarding site and costs resulted in the project lapsing. It revived in 1794 when Jeremy Bentham was given £2,000 to make preparations and in 1799 he came up with his panopticon<sup>20</sup> scheme intended to house 1,000 prisoners, which he proposed to erect in return for the sum of £19,000. This was dropped, but the penitentiary project finally got under way in 1812 when a location at Millbank was chosen. Swampy ground made building difficult, but the position had the advantage of being close to London and yet not having neighbours objecting to the presence of a huge prison in the vicinity. The original estimate assumed a capacity of 300 males and 200 females costing £259,700, but by the time its first part opened in 1816 the outlay had escalated to a massive £458,000 ("It may be doubted whether the Taj at Agra, The Cloth Hall at Ypres or the Cathedral at Chartres had cost anything like this sum"<sup>21</sup>). Although capable of holding up to 1,000 prisoners (600 males and 400 females) in the event it was never used to full capacity: its population varied between 400 and about 800. Originally intended to house those convicted in London and Middlesex, when it opened the inmates came "from every part of England and Wales, until provision should be made for confining such offenders in penitentiary houses elsewhere".<sup>22</sup> Convicts were sent there as an alternative to transportation: the tariff being five years for a seven-year sentence of transportation, seven years for fourteen, and ten years as an alternative for transportation for life, and seem to have been

<sup>18</sup> *Ibid.*, pp. 107–8.

<sup>19</sup> George Holford, *An account of the General Penitentiary at Millbank*, London, Rivington and Hatchard and Son, 1828, p. 2 (quoting Sir William Blackstone).

<sup>20</sup> Panopticon: a building all of whose occupants could be seen from a single vantage point.

<sup>21</sup> Sidney Webb and Beatrice Webb, *English prisons under local government*, London, Longmans, Green, 1922, p. 49.

<sup>22</sup> *Third report of the Inspector of Prisons, Home District*, PP 1837–38 (141), XXX, 1, pp. 49–50.

selected by the judge at the time of sentencing.<sup>23</sup> Reformation was the aim and according to George Holford<sup>24</sup> the ideal subject for the penitentiary was:

... one whose offence is of such a nature as to call for a severe punishment, but whose heart has not been hardened or corrupted, by a profligate course of life, or a long continuance in other prisons ... At all events, we can control the behaviour of the most vicious while they remain in confinement, and prevent them from insulting or contaminating such of their fellows as are less moved to the commission of crime than themselves.<sup>25</sup>

A highly complex building of six pentagons radiating from a central circular chapel, the first part to be completed was inspected by members of the management committee on 23 June 1816; on 26 June the first prisoners arrived. These were females, of whom there were large numbers in the county gaols awaiting transportation.<sup>26</sup> They “were carried in caravans, chained together, from Newgate to Blackfriars bridge, there put on board a barge prepared to receive them, and conveyed under a strong guard of police officers by water to Millbank”.<sup>27</sup> Male convicts began to arrive in January 1817—at the end of that year the prison held 103 males and 109 females. Numbers rose steadily reaching 452 males and 326 females in late 1822. The disciplinary regime was modelled on those at Gloucester penitentiary and Southwell house of correction; the former concentrating on reform through isolation and worship, the latter through rewarded labour and punished faults.<sup>28</sup> Prisoners worked at weaving or tailoring in separate cells until their turn came to operate the machine for raising water (from wells, the source of the prison supply) or at the corn mills, such work being interrupted by spells of walking two by two in the yard, during which time they were allowed to converse quietly. On graduating to the second class through good behaviour they worked in small groups. Prisoners were allowed one eighth of any earnings, paid on discharge. They ate alone in their cells three times daily.<sup>29</sup> All the privies were water closets—there were no smells.<sup>30</sup> The whole was heated—adequately<sup>31</sup> but patchily<sup>32</sup>—in a variety of ways; some parts had stoves, some hot water pipes and the rest hot air, provided from “a contrivance . . . of the nature of a cockle”.<sup>33</sup> Attendance at chapel was compulsory but could give rise to problems: “it not [being] possible to prevent many very improper communications from being made there by one prisoner to another, and plots and

<sup>23</sup> Holford, *An account*, op. cit., note 19 above, pp. 278–9.

<sup>24</sup> George Holford (1767–1839), an MP from 1803 to 1826, was keenly interested in prison management and reform. He became chairman of a committee formed in 1810 which recommended the abandonment of Bentham’s panopticon, later the most active member of the management committee of Millbank penitentiary, of which he was a member from 1816 until his death, and visitor to the penitentiary in the 1822–23 period. In this last capacity he exercised considerable power in the day-to-day running of the prisons. McConville, op. cit., note 1 above, pp. 146–7.

<sup>25</sup> George Holford, *The convict’s complaint in 1815, and The thanks of the Convict in 1825*, London, Rivington, 1825, p. xiii.

<sup>26</sup> Later, and to Holford’s annoyance, it became government policy to accelerate the transportation of

women as wives or “in some other relation to the inhabitants of those distant colonies”. The result was that by 1828 three-quarters of the space available for women at Millbank was empty. (Holford, *An account*, op. cit., note 19 above, pp. lv, 293.)

<sup>27</sup> *The Times*, 27 June 1816.

<sup>28</sup> Evans, op. cit., note 2 above, p. 247, and McConville, op. cit., note 1 above, p. 160.

<sup>29</sup> Holford, *An account*, op. cit., note 19 above, pp. 68–73. For a comprehensive account of the regime at the relevant time, see *Report of the Committee of the General Penitentiary at Millbank*, PP, 1823 (150), V, 365, pp. 1–13.

<sup>30</sup> *Report*, op. cit., note 11 above, p. 76.

<sup>31</sup> *Ibid.*, p. 75.

<sup>32</sup> *Ibid.*, pp. 57–8.

<sup>33</sup> *Ibid.*, p. 75. Cockle: a stove with gills.

### *The Scurvy Scandal at Millbank Penitentiary*

confederacies are sometimes formed there to be carried into execution in other parts of the prison".<sup>34</sup> There were structural teething problems due to the marshy ground, and the prison was not, according to Michael Ignatieff, popular with inmates: "The prisoners, who had been used to the lackadaisical routines of the hulks or the county jails, revolted when subjected to the regimes of solitude, hard labour, and meagre diet".<sup>35</sup> The penitentiary was run by a governor, who, with the rest of his staff, was responsible to a management committee of between ten and twenty members, appointed by the king in council. They were required to make an annual report to parliament, in contrast to the situation in most prisons which, at this stage, were controlled by local magistrates responsible to no authority other than their own. The members took their duties seriously—in the first six months of 1822 there were twenty-six meetings with an average attendance of six, and in the second six months fourteen meetings with an average attendance of four (gentlemen tended to be out of town in the second half of the year, attending to affairs on their estates).<sup>36</sup>

As regards medical care at the penitentiary, it had been recognized from the outset that it was necessary to have a "resident medical gentleman"<sup>37</sup> (in all other English prisons at that time, medical care was provided part-time by local practitioners) and that he (and also the chaplain) should have a degree of independence from the Governor: "they must neither be under strong obligations to the Governor, or subject to his power".<sup>38</sup> The budget would not run to a "person of high standing in the medical line" so it was decided to appoint "such a medical resident as we could afford" together with an honorary consultant physician and an honorary consultant surgeon. The last seems to have played little part in providing day-to-day care, but the physician, Dr A Copland Hutchison MD, took a considerable interest in prison health matters to the extent that in May 1819 it was decided to offer him a salary of £300 (in the event he took £200).<sup>39</sup> The medical resident they could afford "competent to discharge the duties of Surgeon, Apothecary and Man-Midwife . . . a Member of the Royal College of Surgeons"<sup>40</sup> was Mr John Pratt who, in addition to his salary of £400, received free accommodation and heating. Dr Hutchison ranked "over the surgeon".<sup>41</sup>

Situated on the upper floors of the central block were three infirmaries. For the care of the men there was a "distinct warder" (later provided with an assistant<sup>42</sup>) and for the women, nurses were employed.<sup>43</sup> Special food ordered by the surgeon for patients was cooked in a small kitchen adjacent to each infirmary; the normal diet was brought up from the main prison kitchens. As in the chapel, disciplinary lapses abounded:

[The Infirmaries] must always be the parts of the prison, in which irregularities will most frequently prevail, and where most mischief will be hatched . . . A prisoner may have many inducements to

<sup>34</sup> Holford, *An account*, op. cit., note 19 above, p. 66.

<sup>35</sup> Ignatieff, op. cit., note 4 above, p. 171.

<sup>36</sup> *Report*, op. cit., note 11 above, p. 112.

<sup>37</sup> *Ibid.*, p. 79.

<sup>38</sup> Holford Committee, quoted in McConville, op. cit., note 1 above, pp. 133–4.

<sup>39</sup> *Report*, op. cit., note 11 above, p. 79.

<sup>40</sup> McConville, op. cit., note 1 above, p. 149.

<sup>41</sup> *Report*, op. cit., note 11 above, p. 79.

<sup>42</sup> Holford, *An account*, op. cit., note 19 above, pp. 56, 94.

<sup>43</sup> *Ibid.*, p. 94.

endeavour to procure his transfer to the Infirmary; he may wish for a few holidays from work, for better fare than the ordinary diet of the prison, for a change of scene, or an opportunity of making acquaintance with prisoners out of his own ward.<sup>44</sup>

### Dietary Changes at the Prison and their Impact

There was criticism of medical provision on the scale just described<sup>45</sup> but this faded into insignificance compared to the obloquy heaped upon those responsible for the dietary enjoyed by the prisoners. George Holford defended his enlightened views on the subject:

I have often been reproached with their being better fed than the labouring poor in some parts of the country ... the truth of which I do not deny ... The food of persons confined for offences in a prison, as well as their clothing, lodging, and employment, must be regulated with a due regard to their health, (it not being intended to inflict sickness or disease as a part of their punishment,) and the dietary of prisoners becomes therefore a medical question.<sup>46</sup>

He had to suffer his opponents' attempts at humour:

... the luxury of the Penitentiary was a standing joke. The prison was called, "My fattening house." I was told that public economy might be safely [conserved] by parting with many of our officers, as it was unnecessary to keep up an establishment to prevent escape, though it might perhaps be proper to apply for a guard to prevent persons from rushing in.<sup>47</sup>

Food was wasted,<sup>48</sup> unwanted potatoes "were carried out of the prison in the wash tub",<sup>49</sup> and, those concerned to lower the dietary were expounding the doctrine of "less eligibility":

No person ... can have forgotten ... the feelings which existed in the public mind against giving convicts better food in prison, than many of them were likely to enjoy out of it, and the share, which those, who took the lead in the Society for the Improvement of Prison Discipline, had in creating and keeping alive that feeling. [And we had been told] that if we did not content ourselves with a less luxurious table of diet at Millbank, the annual vote for the expense of our establishment would be opposed.<sup>50</sup>

Faced with such a threat George Holford and his committee gave way to the view that the dietary was indeed too luxurious:

In the spring of 1822, it appears to have been the opinion of the principal medical officer, Dr. Hutchison, as well as of the Committee of the Penitentiary, that the Dietary of the prisoners was greater than was conducive to their health. Symptoms of plethora were constantly showing themselves, though principally among the female prisoners, and a general fulness of habit appeared to prevail among all the inmates of the Penitentiary.<sup>51</sup>

Diets at other prisons had been safely reduced.<sup>52</sup> At Dorchester county gaol, for fourteen years the only meat consumed by prisoners came from boiled bones in their soup and,

<sup>44</sup> *Ibid.*, p. 93.

<sup>45</sup> McConville, *op. cit.*, note 1 above, p. 149.

<sup>46</sup> Holford, *An account*, *op. cit.*, note 19 above, pp. 331–2.

<sup>47</sup> *Report*, *op. cit.*, note 11 above, p. 114.

<sup>48</sup> *Ibid.*, p. 29.

<sup>49</sup> *Ibid.*, p. 114.

<sup>50</sup> Holford, *An account*, *op. cit.*, note 19 above, pp. xxxiv–xxxv.

<sup>51</sup> *Report*, *op. cit.*, note 11 above, p. 5.

<sup>52</sup> Holford, *An account*, *op. cit.*, note 19 above, p. xxxvi.



### *The Scurvy Scandal at Millbank Penitentiary*

according to Mr William Morton Pitt, visiting magistrate to the gaol for nearly forty years, all were discharged in better health than on committal.<sup>53</sup> Similarly, an apparently drastic reduction in the diet at Devizes house of correction had resulted in weight gains for most prisoners.<sup>54</sup> However, the tables providing this last piece of information show that some 80 per cent of prisoners were confined for three months or less with the longest sentences being two years. This was also true of Dorchester and of Gloucester penitentiary<sup>55</sup> where a reduction in diet similar to that proposed at Millbank had been introduced reportedly without ill effect.<sup>56</sup> That such comparisons were invalid was pointed out by Dr Hutchison, emphasizing the significance of the difference in length of confinement as compared with Millbank, where all prisoners were long-term. He advised against too much reduction; suggested the opinion of other authorities be obtained.<sup>57</sup> Sir James McGrigor<sup>58</sup> was consulted and agreed that a reduction could safely be made.<sup>59</sup> At this stage each male received per week 10½ lb bread, 14 pints of gruel (porridge made with oatmeal), 7 lb potatoes, 4 pints of meat broth, 6 pints of vegetable broth, and 1½ lb of “coarse pieces of Beef (without bone and after boiling)”; and the females about three-quarters of this. Dr Hutchison proposed that allowances of bread and gruel remain unchanged but that potatoes be reduced to 1 lb weekly and the total amount of animal food be reduced by about one-third. The diet actually introduced in July 1822 was, for the men per week, 10½ lb bread (1 lb of potatoes could be substituted for each 8 oz of bread), 14 pints broth and 7 pints of gruel. For the women, 7 lb 14 oz of bread, 10½ pints of broth and 5¼ pints of gruel.<sup>60</sup> The broth contained one ox-head per 100 prisoners, calculated to equate to 10 oz of meat for each male weekly. The vegetable content of the broth was 1 lb per day to every five prisoners (changed after 23 February 1823 to 1 lb per four at Dr Hutchison’s suggestion) comprising an assortment of celery, carrots, turnips and parsnips with 1½ gills of peas or barley (1½ gills is about 8 oz) alternately. The vegetables were grown on the premises (or if not, bought at Covent Garden) and were inserted after the ox-heads had been boiled. The recipe for gruel is not given but with barley as its principal component it would have contained no vitamin C. Those carrying out extra work were allowed more bread and broth; the sick were given whatever the medical staff thought necessary, including wine—always prescribed for the seriously ill.

The changes meant that from July 1822 there was a reduction in the “animal food” by about two-thirds and in potatoes—by an unknown amount since there is no record of how often the allowed substitution was made. A further reduction crept in—Dr Hutchison

<sup>53</sup> *Report*, op. cit., note 11 above, p. 143. One of the objects of removing meat as such from the diet was to avoid the use of knives and forks. Bread knives were fixed to the tables. *Ibid.*, pp. 114–15.

<sup>54</sup> *Ibid.*, pp. 106–9.

<sup>55</sup> *Report*, op. cit., note 11 above, p. 143; *Felons’ Register, Gloucester County Gaol 1815–1818*, Gloucestershire Record Office, Q/Gc/5/1.

<sup>56</sup> *Report*, op. cit., note 11 above, p. 114.

<sup>57</sup> *Further papers relating to the Penitentiary at Millbank*, PP 1823 (309), V, 387, p. 1.

<sup>58</sup> James McGrigor (1771–1858), army surgeon. Inspector-general of hospitals in 1809, chief of medical staff in the Peninsula 1811, director-general army medical department 1815–1851. Knighted 1814, baronet 1830. *Oxford Dictionary of National Biography*, Oxford University Press, 2004, vol. 35, pp. 447–9.

<sup>59</sup> *Report*, op. cit., note 11 above, p. 333.

<sup>60</sup> *Ibid.*, p. 73, and *Further papers*, note 57 above, pp. 12–13. The figures in different parts of the reports are not totally consistent.

pointed out on 24 and 28 February 1823, that although the number of prisoners in two of the pentagons had increased, the food allowance had not.<sup>61</sup>

Once the change had been made there was apparently little serious immediate impact. In September, Mr Pratt warned the management committee: “although the prisoners appear to be in good health, yet I perceive a pallidness about them, which to me appears to arise from the present dietary, which I am fearful we shall find shortly will increase, accompanied with a diminution of strength, and they will be unable to do any laborious work, particularly weaving, etc”.<sup>62</sup> Dr Hutchison anticipated an increase in bowel complaints (because of the liquid nature of the dietary) but by September there were only eleven cases in a population of 800 prisoners: little changed from the normal.<sup>63</sup> The matron, Mrs Wilkinson (speaking after the event), said she had noticed among the women “A pallid look in general, and I thought a diminution of their strength in general” which got worse in January and February.<sup>64</sup> John Lodge, the taskmaster, denied that there had been any loss of strength among the prisoners in the autumn but thought they did not “work as heartily” in January and February and their looks had altered.<sup>65</sup> On 4 October 1822 Dr Hutchison reported only four deaths in the previous quarter (three females and one male, all in September) and “the prisoners generally are in their usual state of health”, but stressed that it was still too early to assess the full impact. On 10 January 1823 he wrote that although he considered the pentagons too cold, there had been no increase of infirmary cases after Christmas—there were sixty—only one of whom was seriously ill.<sup>66</sup> The rest were: “chiefly of a trifling nature, namely, pulmonic affections or common catarrhs; several complaints of the stomach, real, imaginary, or affected; rheumatism, and a very few cases of slight fever, not attributable to any particular cause”. Of the change of diet: “I am perfectly unconscious of any injurious results, to the health of the prisoners, arising from that cause”.<sup>67</sup> Mr Pratt was less sanguine, on 7 January he wrote advising of “great increase in invalids . . . affections of the lungs, &c. in part arising from the late severe weather, and I fear they have been in some measure brought on from the change in diet”,<sup>68</sup> and on 11 January:

I fear the severity of the weather, accompanied with the diet, has been the cause of the very great increase [of the numbers of sick—from around 60 to around 90: see Table 1]; I think it is obvious that the diet, although sufficiently nutritious for a short time, will, when continued for any considerable period, produce a debility in the stomach, which . . . renders the constitution more liable to receive disease, and particularly so when the mind is affected, from the loss of liberty; and we find the females are more susceptible and subject to more diseases than males.<sup>69</sup>

The first diagnosis of “true scurvy” was made by Dr Hutchison on 10 January 1823.<sup>70</sup> Mr Pratt echoed this on 4 February: “We have five or six cases partaking of the nature of scurvy, which I fear can only be accounted for from the dietary”. Dr Hutchison confirmed three male and two female cases on 8 February; one of these women died from

<sup>61</sup> *Further papers*, op. cit., note 57 above, pp. 6–7.

<sup>62</sup> *Report*, op. cit., note 11 above, p. 100.

<sup>63</sup> *Report*, op. cit., note 12 above, p. 53.

<sup>64</sup> *Report*, op. cit., note 11 above, p. 102.

<sup>65</sup> *Ibid.*, p. 103.

<sup>66</sup> *Further papers*, op. cit., note 57 above, p. 2. He must have been speaking of the week

before: there were in fact 85 on 10 January (Table 1).

<sup>67</sup> *Further papers*, op. cit., note 57 above, p. 4.

<sup>68</sup> *Report*, op. cit., note 11 above, p. 116.

<sup>69</sup> *Ibid.*, p. 100.

<sup>70</sup> *Ibid.*, pp. 49–50.



*The Scurvy Scandal at Millbank Penitentiary*

*Table 1*  
Numbers of Patients in the Infirmaries January to March 1823<sup>a</sup>

Jan				Feb				Mar			
Day	Males	Females	Total	Day	Males	Females	Total	Day	Males	Females	Total
1	17	36	53	1	12	43	55*	1	44	66	110
2	18	48	66*	2	15	45	60	2	54	72	126
3	19	41	60	3	17	46	63	3	59	77	136
4	20	42	62	4	17	51	68	4	64	81	145*
5	17	45	62	5	20	46	66	5	62	80	142
6	19	48	67	6	18	50	68	6	47	73	120
7	22	48	70	7	21	45	66	7	45	64	109
8	21	59	80	8	24	43	67	8	48	65	113
9	20	59	79	9	23	47	70	9	45	54	99
10	20	65	85	10	25	47	72	10	42	58	100
11	21	70	91	11	21	42	63	11	43	52	95
12	18	72	90	12	22	38	60	12	45	51	96
13	19	67	86	13	22	37	59	13	40	50	90
14	19	65	84	14	21	32	53	14	44	54	98
15	15	60	75	15	18	44	62	15	42	54	96
16	17	56	73	16	22	46	68	16	41	59	100
17	16	45	61	17	22	34	56	17	38	52	90
18	16	43	59	18	23	35	58	18	43	57	100
19	16	43	59	19	25	35	60	19	44	60	104
20	19	43	62	20	26	39	65	20	43	69	112
21	19	43	62	21	27	43	70	21	42	65	107
22	21	42	63	22	32	50	82	22	37	59	96
23	22	46	68	23	33	51	84	23	37	59	96
24	19	43	62	24	33	51	84	24	32	56	88
25	17	40	57	25	37	59	96	25	36	57	93
26	19	43	62	26	42	63	105	26	37	58	95
27	19	50	69	27	42	61	103*	27	39	61	100
28	18	50	68	28	42	66	108	28	41	63	104
29	14	45	59					29	42	66	108
30	13	44	57					30	40	62	102
31	11	44	55					31	32	55	87

<sup>a</sup>*Report of the physicians on the state of the General Penitentiary at Milbank*, PP, 1823 (256), V, 379, p. 8.

\*I have corrected the additions from those given in the published tables.

consumption of many months duration.<sup>71</sup> On 14 February Sir James McGrigor again gave his opinion: “having seen the whole of the female, and many of the male prisoners, he found them not in an unhealthy state . . . diseases [in the infirmaries] were not, except in a very few instances, of a serious character, and not attributable to diet or confinement”.<sup>72</sup>

<sup>71</sup>Ibid., pp. 34, 36, 100.

<sup>72</sup>Ibid., p. 7.

Numbers of sick reverted to the usual level, but rose in the last week of February (Table 1). With this rise came the first note of concern regarding severe gastro-intestinal problems, emerging in Dr Hutchison's comment on 24 February 1823 when he reported more cases of flux with one death from flux,<sup>73</sup> as well as "one well marked case of scurvy, and two others of less distinct character". At this point he commented "There is a species of flux styled by writers scorbutic dysentery, and this appears to me to be the disease under which the prisoners in the Penitentiary now labour". He recommended more vegetables in the soup and more exercise in the open air.<sup>74</sup> Four days later he advised that all prisoners should have more meat, vegetables, and an ounce of lemon juice weekly; such adjustments would he felt "materially lessen, if not remove, the scorbutic diathesis that now so much prevails".<sup>75</sup> On 27 February Mr Pratt also drew attention to the problem of diarrhoea:

There has been a great number of slight attacks of diarrhoea in the pentagons, but which are doing well; this has been both in the males and females; and there is, I apprehend, the scurvy among them, which has made its appearance on their legs, having discovered spots, although the grand mark distinguishing that disease, the wasting and spongy appearance of the gums, had not taken place.<sup>76</sup>

At this point the management committee took alarm and on 28 February called in two physicians, Dr P M Latham MD and Dr P M Roget MD, who commenced their duties on 1 March (and from the end of July until November 1823 were assisted by Drs Hue, Mac-michael and Southey<sup>77</sup>). Dr Hutchison was told that this step would "be a relief to his mind, as it will be satisfactory to [the committee members] and the public, the attention of which, seems to have been already drawn to this important subject".<sup>78</sup> Dr Hutchison continued to attend the penitentiary but his instructions were not obeyed,<sup>79</sup> and an increasingly acrimonious correspondence with the management committee ensued.<sup>80</sup> Dr Hutchison stressed that he was more familiar with sea scurvy than most practitioners, having served at sea for several years and had been one of the principal medical officers at the Naval Hospital at Deal for between seven and eight years.<sup>81</sup> He also pointed out that had his suggestions been followed a year earlier, the dietary reduction would have less draconian, and that when health problems emerged his response had been immediate. To no avail, having refused to resign he was dismissed on 19 April 1823.<sup>82</sup> On this occasion, ten of the committee were present; their decision was unanimous, but Mr Morton Pitt who was unable to attend subsequently resigned "to some extent" because of the injustice done to Dr Hutchison.<sup>83</sup>

Meanwhile, Drs Latham and Roget approached their new task with enthusiasm and, although neither of them had any worthwhile experience of scurvy,<sup>84</sup> they contrived to diagnose scorbutic diarrhoea in 448 of 858 prisoners. Of the 231 males so labelled, 23 per cent of those imprisoned for less than a year were affected, for one to two years 47 per cent, for two to three years 55 per cent, for three to four years 68 per cent and for more than four years 78 per cent. The corresponding figures for females were 32 per cent, 70 per cent,

<sup>73</sup>The distinction between flux and diarrhoea is not always clear. In general, flux seems to have been worse than diarrhoea with dysentery worse than either.

<sup>74</sup>*Further papers*, op. cit., note 57 above, p. 6.

<sup>75</sup>*Ibid.*, p. 7.

<sup>76</sup>*Report*, op. cit., note 11 above, p. 100.

<sup>77</sup>Latham, note 13 above, p. xiv.

<sup>78</sup>*Further Papers*, op. cit., note 57 above, p. 7.

<sup>79</sup>*Report*, op. cit., note 11 above, pp. 117, 134–5.

<sup>80</sup>*Further papers*, note 57 above, pp. 1–14.

<sup>81</sup>*Ibid.*, p. 8.

<sup>82</sup>*Report*, note 11 above, pp. 8–14.

<sup>83</sup>*Ibid.*, pp. 113, 147. See also *The Times*, 29 May 1823.

<sup>84</sup>*Ibid.*, p. 28.

### *The Scurvy Scandal at Millbank Penitentiary*

70 per cent, 82 per cent and 43 per cent.<sup>85</sup> The diagnosis was made, it seems, largely on the basis of small brown spots (as noted by Mr Pratt) on the legs of affected prisoners, some of whom had, and some of whom did not have, diarrhoea. Their judgement was supported by Sir Gilbert Blane MD visiting the prison at a later date and who, from second-hand descriptions, had no doubt that the prisoners were suffering from sea-scurvy.<sup>86</sup> Drs Latham and Roget recommended more meat in the diet, rice, white bread instead of brown, and that each prisoner should have three oranges a day (subsequently reduced to one orange daily).<sup>87</sup> A total of 86,009 oranges were bought, “till we had spent £300 of the public money, and raised the price of the article in the market”.<sup>88</sup> Those with diarrhoea were given pills made up of chalk, opium, aromatic and mercury—this last component (given in direct contradiction of the instructions of Dr Hutchison<sup>89</sup>) guaranteed to produce the soreness of the gums which Mr Pratt had found so notably lacking in the supposed cases of scurvy. On 2 June 1823, Dr Latham stated: “it is quite clear that in some of those in whom [Sir Gilbert Blane] considered scurvy to exist . . . their gums were affected by mercury”.<sup>90</sup> Fortunately, it seems that many convalescent patients (sensibly we might think) threw their pills out of the window.<sup>91</sup>

The results of the therapeutic efforts of Drs Latham and Roget were mixed. Surveys carried out between 31 March and 4 April showed that the scurvy had largely disappeared.<sup>92</sup> However, numbers of sick barely changed in March, the month following their take-over (Table 1), but due to a large increase in diagnoses of diarrhoea, escalated dramatically in May, June and July (Table 2). These numbers compare very unfavourably with those in the whole of the last six months of 1822, when the daily number of patients in the infirmary averaged between 35 and 47.<sup>93</sup> Even more noticeable is the increase in the death rate after 1 March 1823. There were two deaths in January, six in February, eleven in March, six in April, four in May and four in June—a total of 33 in the first six months of 1823. This total is compiled from the Parliamentary reports: thirty deaths between 7 January 1823 and 9 June 1823 listed in inquest reports,<sup>94</sup> another inquest report on a death which took place on 26 June 1823,<sup>95</sup> and evidence from Dr Latham to the effect that there had been two further deaths between 12 June and 17 June 1823.<sup>96</sup> Given that there were 858 prisoners at the beginning of March and assuming that this number is representative for the first six months of 1823,<sup>97</sup> the annual death rate was 7.7 per cent. By contrast there were 17 deaths in an average of 631 convicts in 1821 (2.7 per cent) and 22 deaths in 745 in 1822 (2.9 per cent).<sup>98</sup> Of the 33 deaths, 25 apparently had

<sup>85</sup> *Report*, op. cit., note 9 above, p. 7.

<sup>86</sup> As distinct from “land-scurvy” (which seems to have been a form of atopic dermatitis). Sir Gilbert Blane (1749–1834) had promoted the consumption of lemon juice in the navy forty years earlier. He claimed the word scurvy derives from the Saxon for sore mouth.

<sup>87</sup> *Report*, op. cit., note 9 above, pp. 4–6.

<sup>88</sup> George Holford, *Third vindication of the General Penitentiary*, London, Rivington, 1825, p. 70. Presumably the initial price was one penny per orange, rising with the increased demand.

<sup>89</sup> *Report*, op. cit., note 11 above, pp. 135, 137.

<sup>90</sup> *Ibid.*, p. 103.

<sup>91</sup> *Ibid.*, p. 237.

<sup>92</sup> William Baly, ‘On the prevention of scurvy in prisons, pauper lunatic asylums, etc.’, *Lond. med. Gaz.*, 1842–43, 1 (n.s.): 699–703, p. 701.

<sup>93</sup> *Report*, op. cit., note 11 above, p. 206.

<sup>94</sup> *Ibid.*, pp. 150–65.

<sup>95</sup> *Ibid.*, pp. 311–13.

<sup>96</sup> *Ibid.*, p. 176.

<sup>97</sup> *Ibid.*, p. 392. There were 531 males and 327 females.

<sup>98</sup> *Ibid.*, note 11, p. 399. The deaths in 1821 and 1822 had been “mostly visceral and a few cases of continued fever” (*ibid.*, p. 362).

Table 2  
Prisoners under treatment<sup>a</sup>

Complaint		Men	Women	Total
<i>15 May 1823</i>				
Diarrhoea	Ill	46	44	90
Ditto	Better	48	87	135
Ditto	Well	49	20	69
Other complaints		21	30	51
Total		164	181	345
<i>23 May 1823</i>				
Diarrhoea	Ill	63	46	109
Ditto	Better	51	56	107
Ditto	Well	64	47	111
Other complaints		24	35	59
Total		202	184	386
<i>11 June 1823</i>				
Diarrhoea	Stationary	73	35	108
Ditto	Improving	86	38	124
Ditto	Well	82	88	170
Other complaints		24	28	52
Total		265	189	454
<i>3 July 1823</i>				
Diarrhoea	Stationary	17	22	39
Ditto	Convalescent	70	37	107
Ditto	Well	179	83	262
Ill of other diseases		8	22	30
Total		274	164	438

<sup>a</sup>*Report from the Select Committee on the state of the General Penitentiary at Millbank*, PP, 1823 (533), V, pp. 18, 148, 394.

a gastro-intestinal cause, many with severe diarrhoea some of whom showed neurological symptoms, such as fits or apoplexy. The case histories given in inquest reports do not make it immediately apparent that those with gastro-intestinal symptoms and those with neurological features were suffering the same disease process, but Dr Latham, after his prolonged close contact with both fatal and non-fatal cases, gave his considered opinion that there was a common aetiology.<sup>99</sup> Most of the remaining 8 deaths were probably due to tuberculosis (“consumption”, “scrofula”, sometimes the two together and one probable tuberculosis of the spine leading to paraplegia). Of the total, 17 were female, 15 male, and for one the sex is not given; the longest period of confinement at Millbank was six years (with a mean of 28 months) whilst John Lampard, who died on 15 June 1823 had been in the prison for only a month or two; the age range was fifteen to forty-eight

<sup>99</sup>Latham, *op. cit.*, note 13 above, pp. 154–5

*The Scurvy Scandal at Millbank Penitentiary*

*Table 3*  
Cases of diarrhoea at Millbank Penitentiary 1816–1822<sup>a</sup>

Year	Number of Prisoners	Cases of Diarrhoea	Percentage admitted to Infirmary
1816	72	23	61
1817	212	104	3.8
1818	246	106	34
1819	351	82	45
1820	609	85	71
1821	798	87	84
1822	866	88	61

<sup>a</sup>Adapted from Peter Mere Latham, *An account of the disease lately prevalent at the General Penitentiary*, London, Underwood, 1825, p. 255.

with a mean of twenty-seven years; nearly all were stated to be in good health when committed.<sup>100</sup> The only exception was Charles Thompson who was “emaciated when admitted into this prison” according to Mr Pratt, but family members giving evidence at the inquest claimed he was in excellent health on committal.<sup>101</sup>

There had previously been a steady, but relatively low, incidence of diarrhoea in this (Table 3), as in other prisons.<sup>102</sup> In the month of September 1822 out of 800 prisoners—on the new diet—there were only eleven cases.<sup>103</sup> There was some controversy over the accuracy of the figures for previous years which may have been exaggerated, based as they were on the number of prescriptions given. It was alleged that prisoners perhaps feigned diarrhoea in order to enjoy the opium in the medication (not containing mercury at that time) or in order to avoid work.<sup>104</sup> Dr Hutchison asserted that it was not uncommon for prisoners to simulate diarrhoea. “I have seen convicts . . . break down with their fingers, in their urinary utensils, a good figured or formed motion, and intimately mix it with the urine, so as to induce the belief that it was in reality a diarrhoeal motion”.<sup>105</sup> Dr Latham, who believed that the disease which wreaked such havoc in 1823 was already endemic in the prison, refused to accept the possibility that prisoners would, or could, feign diarrhoea.<sup>106</sup> Of eleven severe diarrhoea cases in the thirty-two months prior to January 1823 six were fatal—five in 1822, the most recent on July 2.<sup>107</sup> Clearly, in the first half of 1823 there was a huge increase in the incidence of diarrhoea of a serious nature, and of resulting deaths.

After yet more medical experts had been called in, the decision was made to evacuate the penitentiary. Many prisoners were released either on the grounds of sickness or because their sentence was coming to an end; and, on the basis that the “contagion” would “linger in the prison”, the rest were removed over a period of several months. First to go were

<sup>100</sup>Ibid., pp. 203–4; *Report*, note 11 above, pp. 150–65, 176, 311–13.

<sup>101</sup>*Report*, op. cit., note 11 above, pp. 312–13.

<sup>102</sup>Peter McRorie Higgins, ‘Medical care in English prisons 1770–1850’, PhD thesis, Open University, 2004, pp. 111–14.

<sup>103</sup>*Report*, op. cit., note 12 above, p. 53.

<sup>104</sup>Ibid., pp. 52 and 102.

<sup>105</sup>Ibid., p. 81.

<sup>106</sup>Latham, op. cit., note 13 above, pp. 255–9.

<sup>107</sup>Ibid., pp. 256. Mr Pratt gave different figures: 2 deaths in 1820, 2 in 1821 and 3 in 1822 (*Report*, note 12 above, p. 24).

female prisoners, transferred at the end of July to the ophthalmic hospital at Regent's Park. The move did not help; on 15 October 1823 it was reported that of 101 prisoners, 70 were on medication, 32 were too ill to attend divine service and 12 were sick in bed. Relapses were constantly occurring; three out four turnkeys were unwell as were two male servants.<sup>108</sup> In November and December, as a result of the persisting problem, the women were moved again, this time to the hulks *Narcissus* and *Heroine*. Even then all was not well and on 4 March 1824, Mr Pratt reported that of 167 women, 53 were in the infirmary; and although the disease was of a milder character, yet it was of the same nature (despite their now being on a much improved diet).<sup>109</sup> On 17 March, Mrs Wilkinson (matron) told the committee that the women on both *Heroine* and *Narcissus* were very ill, no better than in Regent's Park and that at least two of the turnkeys were ill, one severely. However, none had been unduly "subject to catarrhs or colds" since their removal from the penitentiary.<sup>110</sup> There were three female deaths between 30 June and 15 December and also two male deaths in this period<sup>111</sup> but, according to Mr Pratt, only one of these—in the penitentiary in August 1823—resulted from diarrhoea.<sup>112</sup> There must be a slight doubt regarding the severity of this continuing illness for, as Dr Latham implies, the residual women knew it was in their interests to be ill to obtain pardon.<sup>113</sup> In any event, it was decided to release the female prisoners still in the hulks, a process completed by 18 June 1824, after which most recovered their normal health.<sup>114</sup>

The men were removed between September 1823 and January 1824 to the hulks *Ethalion* and *Dromedary* where, in marked contrast to the situation prevailing amongst the women, a report from *Ethalion* on 15 October stated that of 196 prisoners, only 23 were in the infirmary and none was in bed from diarrhoea. Of the officers, three who were "severely attacked" at Millbank had now recovered.<sup>115</sup> Later, "the disease which prevailed to so alarming an extent last year had gradually subsided, and on the 4th of March [1824], out of 467 males only 39 were in the infirmary". When, in 1824, the males were distributed among other hulks, their health was no different than that in the generality of prisoners.<sup>116</sup>

After improvements to its drainage and heating, the penitentiary re-opened in August 1824 and by the end of that year held 106 males and 24 females. The numbers gradually increased to 471 males and 113 females at the end of 1827, still significantly fewer than the 575 males and 303 females held on 4 June 1823.<sup>117</sup> By now George Holford wrote, "we have got back to a dietary regime somewhat higher than that which was denounced for its superabundance".<sup>118</sup> He had doubts as to whether the 1823 outbreak really was as extensive as had been made out:

I believe that a great majority of the cases, for which medicine may have been properly given in the Penitentiary, would never have been brought under the observation of a Physician or Apothecary, if

<sup>108</sup> *Report*, op. cit., note 12 above, p. 97.

<sup>109</sup> *Ibid.*, p. 23.

<sup>110</sup> *Ibid.*, pp. 82–3.

<sup>111</sup> *Ibid.*, p. 109. Assuming that this figure is correct and assuming that, as a result of discharges, the number of prisoners had fallen to around 600, this gives an annual mortality rate of only 1.7 per cent.

<sup>112</sup> *Report*, op. cit., note 12 above, p. 23.

<sup>113</sup> Latham, op. cit., note 13 above, pp. 191–3.

<sup>114</sup> Holford, *Third vindication*, op. cit., note 88 above, pp. 151–2.

<sup>115</sup> *Ibid.*, p. 136.

<sup>116</sup> Latham, op. cit., note 13 above, pp. 195–7.

<sup>117</sup> Holford, *An account*, op. cit., note 19 above, pp. 34–5.

<sup>118</sup> *Ibid.*, p. 331.



## *The Scurvy Scandal at Millbank Penitentiary*

they had occurred out of the prison, or have been known to any but the parties affected, who would (to use a common phrase) have allowed the disorder to carry itself off, or, perhaps, have varied their food.<sup>119</sup>

### **The True Cause of the Outbreak**

In assessing the significance of the health problems which undoubtedly occurred in 1823–24 there are several points to consider. Was this really a massive outbreak of scurvy? If scurvy did not cause the deaths, what did? To what extent were dietary changes responsible for the deaths? And finally, why was Dr Hutchison sacked? Was he the scapegoat?

Scurvy is now very rare in Britain and even in the early nineteenth century was uncommon. The only doctors with real experience of the disease were those who had served in the Royal Navy—as had Dr Hutchison. Another such, Dr Baird, with an impressive record of thirty-eight years of naval service gave evidence and provided a description of scurvy not dissimilar to that in modern textbooks:

On the legs and lower extremities purple spots appear, first much resembling those you see on salmon trout; the gums begin to swell and become putrid, the legs and thighs swell much and become discoloured, the hams contract, great difficulty of breathing follows, a general loss of strength; and in the very last stage of it very often the skin becomes so distended as to burst, producing a sore . . . oozing . . . bloody serum; and in the latter stages of it, dysentery attended with haemorrhage and death.

As an afterthought he added: “also . . . bleeding of the nose and those surfaces which are thinly covered with cuticle”.<sup>120</sup> He went on to affirm that soreness of the gums was always present in scurvy and refuted the idea that discolouration of the legs and diarrhoea in combination could be pathognomic.<sup>121</sup> A committee of six from the Royal College of Physicians visited the prison and in their report dated 27 June 1823 concluded: “From the testimony of the medical officers, compared with the details given uniformly by the patients themselves, of the former stages of the disease prevalent amongst them, that the disorder has borne a *dysenteric* character”.<sup>122</sup> Dr James Johnson visited the prison on 17 June 1823 and was asked what proportion of the patients were now afflicted with scurvy: “Very few indeed; I do not think I saw more than four cases, and I examined upwards of two hundred . . . The rest were all cases of diarrhoea . . . Yes; in the rest I could see nothing but the bowel complaint . . . scurvy is not, as far as I have seen, always or even generally accompanied with flux”.<sup>123</sup> This last statement is highly significant, contradicting as it does Dr Hutchison’s earlier opinion.

As a final piece of evidence, twenty-five of the thirty-three deaths occurred after the beginning of March, that is when the prisoners had the benefit of a greatly improved dietary

<sup>119</sup> Holford, *Third vindication*, op. cit., note 88 above, p. 71.

<sup>120</sup> *Report*, op. cit., note 11 above, p. 200. For modern descriptions of scurvy see Jay H Steen (ed.), *Internal medicine*, St Louis, Mosby, 1998, p. 2107; and

P J Rees and D G Williams, *Principles of clinical medicine*, London, Arnold, 1995, p. 417.

<sup>121</sup> *Report*, op. cit., note 11 above, p. 205.

<sup>122</sup> *Ibid.*, p. 9.

<sup>123</sup> *Ibid.*, p. 175.

containing—specifically—a vitamin C content at therapeutic levels. In fairness to Drs Latham and Roget they too realized their error and on 4 July 1823 admitted as much (an admission which has escaped the attention of modern historians relying on the preliminary report published on 5 April 1823):

Unquestionably, then, we do believe, that some injurious influence has been in operation, over and above the causes to which the epidemic was originally imputed. This injurious influence may have been present from the first, or it may have been subsequently super-added. Whatever it be, it has hitherto eluded our detection; and, whether it is, or is not in operation at present we cannot tell.<sup>124</sup>

In his 1825 publication, Dr Latham went further: “I cannot help coming to this [contagion] as the most probable belief”.<sup>125</sup>

That there had been a few cases of scurvy at Millbank cannot be doubted; Dr Latham describes the case of Henry Peers (who recovered): “[his] mouth seemed in a state of absolute rottenness, the gums bleeding and broken down, the teeth loose”. He also had tightening of the leg muscles and dropsy.<sup>126</sup> It is impossible to give a precise figure for the dietary’s vitamin C content: prolonged cooking reduces its level and it is possible that the prescribed vegetable content of the broth was not always achieved. However, it seems likely that before July 1822 the prisoners received an adequate 30 mg. daily (for the men—rather less for the women) reduced thereafter to a distinctly marginal 10 mg. daily (at most).<sup>127</sup> Much of the reduction was accounted for by the elimination of potatoes from the dietary; had the substitution of potatoes for bread (as was allowed) taken place on a regular basis, the intake of vitamin C would probably have sufficed, but the prison’s own potato crop failed<sup>128</sup> so this probably did not happen. In addition, some of the women had chosen to substitute gruel for their evening portion of broth—further reducing an already barely adequate intake of the vitamin.<sup>129</sup>

Although the admirable James Lind had discovered a cure for scurvy in 1754,<sup>130</sup> due in part to what now seems a strange reluctance to accept the obvious and even more to the perceived need for a really stringent diet, its presence was recorded intermittently in prisons throughout the early nineteenth century. Thus at Norwich county gaol the surgeon stated: “[scurvy] requires the greatest attention, and the diet is scarcely sufficient to keep it down . . . in 1826 . . . eighteen persons were violently attacked by it”. He had not seen any cases in his private practice.<sup>131</sup> On 6 January 1847, the surgeon at Littledean (Gloucestershire) house of correction noted a case of “Insanity and Scurvy caused by long confinement and want of vegetable food”. He prescribed watercress and lemon juice; by 23 January 1847 the scurvy had been cured.<sup>132</sup> Other instances were recorded at Swaffham<sup>133</sup> and Coldbath-fields houses of

<sup>124</sup>Ibid., p. 394.

<sup>125</sup>Latham, op. cit., note 13 above, p. 236.

<sup>126</sup>Ibid., pp. 28–9.

<sup>127</sup>Carpenter, op. cit., note 5 above, pp. 204–8.

<sup>128</sup>Report, op. cit., note 11 above, p. 97.

<sup>129</sup>Ibid., p. 104.

<sup>130</sup>Roy Porter, *The greatest benefit to mankind: a medical history of humanity from*

*Antiquity to the present*, London, HarperCollins, 1997, p. 295.

<sup>131</sup>*First report of Inspector of Prisons, Northern District*, PP 1836 (117), XXXV, 161, p. 39.

<sup>132</sup>*Surgeon’s journal, Littledean House of Correction*, Gloucestershire Record Office, Q/Gli 18/3.

<sup>133</sup>*First report*, op. cit., note 131 above, p. 49.

correction.<sup>134</sup> The prison inspector was particularly unhappy with the state of affairs at Springfield county gaol (Chelmsford) where:

The most prevalent disease is one deserving very serious attention, inasmuch as it is clearly the result of hard labour for too protracted periods, with inadequate diet,—namely, scurvy, or *Purpura haemorrhagica*. This disease may be described to be a state in which the blood dissolves, and the serum, which is the vehicle for transmitting the red particles, separates and deposits itself elsewhere. The constitution is in a condition of decay, and, as the first symptoms of it, the gums become swelled and spongy, and legs are cramped and painful, with red spots appearing on them. The disease usually appears after several months of tread-wheel labour, the period varying according to the constitution of the prisoner; and it very rarely happens that a prisoner can stand the wheel for 12 months, or even nine months, without his health suffering. The scurvy will generally yield to a more nutritious diet, and to tonics and acids, but, after an interval, it will often break out again in the same patient. It first appeared in this prison in the year 1826; in 1827 it prevailed to an alarming extent; and it has continued, more or less, to affect the prisoners down to the present time. We saw several prisoners having the symptoms above described at the time of our inspection. We regret to be obliged to add that cases have occurred in which it is too plain that this disease has been mistaken by the medical attendants.<sup>135</sup>

At Huntingdon county gaol there had been several cases of scurvy, chiefly among long-term prisoners. Unusually, the surgeon stated: “I have noticed [similar cases] even in my private practice”.<sup>136</sup> In 1845, scurvy had been prevalent at Ely gaol, attributed by the surgeon to the lack of ventilation in the new prison but by the inspector to a “low and unvarying diet”.<sup>137</sup> Swaffham house of correction featured again in the 1842 report. There were six cases diagnosed as scurvy, treated with what seems like a sublime disregard of known fact. First tried was an “effervescing mixture of acid”—this was ineffective. Equally useless were bark and sulphuric acid; the addition of porter to the diet was little better. However, a daily lemon provided the cure.<sup>138</sup> An even more bizarre prophylactic was discovered at Shepton Mallet house of correction where it was noted that only the male prisoners suffered from scurvy, the females were apparently protected by the “alkaline ley”<sup>139</sup> used in their work of washing.<sup>140</sup> After dealing with an outbreak at the General Prison at Perth in 1846, Dr Robert Christison was convinced that milk (in fact milk does contain a small amount of vitamin C) had cured his patients.<sup>141</sup> However, it would be wrong to be too critical of the apparent ignorance of these prison medical attendants. In the 1840s some authorities still clung to the paramount need for “animal food” or mineral salts in the prevention of scurvy; and as late as 1870 the eminent physician J A Villemin asserted

<sup>134</sup> *Second report of Inspector of Prisons, Home District*, PP 1837 (89), XXXII, 1, p. 81.

<sup>135</sup> *Ibid.*, p. 304.

<sup>136</sup> *Ninth report of Inspector of Prisons, Northern and Eastern District*, PP 1844 (595), XXIX, 227, p. 15.

<sup>137</sup> *Tenth report of Inspector of Prisons, Northern and Eastern District*, PP 1845 (675), XXIV, 1, p. 197.

<sup>138</sup> *Seventh report of Inspector of Prisons, Northern and Eastern District*, PP 1842 (420), XXI, 1, pp. 141–2.

<sup>139</sup> Ley: obsolete form of lye. Lye is alkalinized water used for washing cloth, OED.

<sup>140</sup> *Fifteenth report of Inspector of Prisons, Southern and Western District*, PP 1850 (1236), XXVIII, 579, p. 31.

<sup>141</sup> Robert Christison, ‘Account of an epidemic of scurvy which prevailed at the General Prison at Perth in 1846’, *The Monthly Journal of Medical Science*, 1847, 78: 873–91, *passim*.

“scurvy is a contagious miasm, comparable to typhus”.<sup>142</sup> More astute was Dr William Baly, physician to Millbank Penitentiary and Lecturer in Forensic Medicine at St Bartholomew’s Hospital, who in 1843 produced convincing evidence that potatoes prevented scurvy.<sup>143</sup> This view was supported, but the potato blight, which wreaked such havoc in the west of Ireland, made an impact on prison health as noted by prison inspector John G Perry:

In connexion [*sic*] with the subject of health, it is highly interesting to remark that the opinion which has lately so universally prevailed, of the value of potatoes as an article of Prison diet, in supplying the best preservative against scurvy, has met with strong confirmation from the effects which have attended the necessary discontinuance of that vegetable, during the late scarcity. Scurvy, which since the universal adoption of potatoes, had become almost unknown in prisons, has reappeared during the last 18 months, although its ravages have been in all instances checked by the adoption of suitable measures.

In support of this statement Perry quoted the deaths from scurvy in the general population: 16 in 1842, 13 in 1843, 21 in 1844, 25 in 1845, 28 in 1846, rising to 78 in 1847.<sup>144</sup> A similar relationship between scurvy and the absence of potatoes had been noted at Salford county gaol and at Kirkdale (Liverpool) house of correction (where the condition was previously unknown); in both cases relief was obtained by appropriate dietary adjustments.<sup>145</sup> It is also noteworthy that the outbreak at Perth, mentioned above, followed the removal of potatoes from the dietary as a result of the blight. Clearly scurvy could occur in prisons, and as we now know, was almost entirely a result of a simple deficiency in the diet, perhaps compounded by an excessive work-load.

### Conclusions

Thus, it would seem that Drs Latham and Roget, summoned to solve a problem the nature of which they were unable to understand, initially clutched at the diagnostic straw offered by Dr Hutchison when he identified (incorrectly as we can now be sure) scorbutic dysentery in a few patients. They magnified his error by applying this label to nearly half the inmates of the penitentiary—all on the basis of spots on the legs, some of them “so small as to be almost imperceptible to the naked eye”,<sup>146</sup> even the more noticeable of which were “small brown spots like flea-bites”.<sup>147</sup> Another support offered for the diagnosis was their autopsy finding of “*Ecchymoses*; that is, spots of the same kind as those which on the skin constitute scurvy” on the intestines of “two prisoners who died dysenteric”.<sup>148</sup> Neither these cutaneous spots nor the ecchymoses would now be accepted as diagnostic criteria for scurvy. Clearly, the diarrhoea and deaths had a cause; if not scorbutic dysentery then what was the aetiology?

<sup>142</sup> Carpenter, *op. cit.*, note 5 above, pp. 103–9, 127.

<sup>143</sup> Baly, *op. cit.*, note 92 above, *passim*.

<sup>144</sup> *Twelfth report of Inspector of Prisons, Southern and Western District*, PP 1847–48 (908), XXXV, 1, pp. v–vi.

<sup>145</sup> *Thirteenth report of Inspector of Prisons, Northern District*, PP 1847–48 (997), XXXVI, 361, pp. 24, 20.

<sup>146</sup> *Report*, *op. cit.*, note 11 above, p. 57.

<sup>147</sup> *Ibid.*, p. 60.

<sup>148</sup> *Report*, *op. cit.*, note 9 above, p. 2. The value of autopsy evidence is, in any event, of doubtful value. The examinations could not be carried out until the coroner’s inquest was complete: usually three or four days after death.

### *The Scurvy Scandal at Millbank Penitentiary*

A good description of the symptoms suffered by the prisoners is given by Dr Augustus Granville who visited in June 1823:

With some few exceptions all the prisoners I saw or examined, have been labouring under various modifications of a bowel complaint, for two, and some few cases, three months, with more or less intensity in the attack, so that in some it appeared as common diarrhoea attended with pain in the belly, &c. and in others, as dysentery with fever, and in some few cases, with the appearance of blood in the evacuation; . . . some were recovering from a first and a second relapse they had had after recovery; . . . some who were ill and complaining, had had only one or two evacuations a-day, while others had had eight, nine, ten, eleven, and even twelve.<sup>149</sup>

Thirteen of those whose death seemed to have a gastro-intestinal cause had diarrhoea as a main feature, although, as Dr Granville noted in the patients he saw, its duration varied considerably: from a few days to over three months. Although it might seem to a modern investigator that an infective agent was at work, this was far from obvious at the time. Some of the parliamentary enquiry witnesses actually attributed diarrhoea to the *improvement* in diet after 1 March (this was the opinion of Mr Anthony White, the consultant surgeon to the prison);<sup>150</sup> and lemon juice—as prescribed by Dr Hutchison—was thought to cause diarrhoea,<sup>151</sup> whilst Drs Latham and Roget, initially firmly wedded as they were to the “scorbutic dysentery” theory, at that stage felt that it could not be infective because “the officers and servants of the Establishment, together with their families, residing within the walls of the prison, and amounting to 106 individuals, were universally exempt from the disease”.<sup>152</sup> Also: “marsh miasmata always arise during the hot, and never during the cold seasons of the year”<sup>153</sup> and “individuals . . . employed in the kitchen by day, and had access to richer diet, were universally exempt”.<sup>154</sup> All this they concluded, ruled out an infective aetiology and confirmed that the dietary was at fault. In fact they were wrong about the staff who had been affected; “three or more” of the turnkeys using the same privies as the prisoners suffered,<sup>155</sup> and Dr Latham himself describes the death of an infirmary nurse suffering from “the reigning disease in the prison”.<sup>156</sup> Cases of diarrhoea continued well after the diet was improved—in fact their number increased—and, again to quote Dr Latham, “From 16<sup>th</sup> of February to June, 132 prisoners were admitted, namely, 127 males, and five females. Of these 103 suffered the disease, namely, ninety-eight males, and five females”, and one of these died.<sup>157</sup> Clearly, a diet deficient in vitamin C and other nutriments could not be blamed for these illnesses and we can now be fairly sure that an infective agent was responsible. And yet, the disease did not spread outside the prison. There was just one exception—this to the family of the Revd Dr Bennett who had employed a female prisoner, herself already sick, in his household.<sup>158</sup> Otherwise there was no disease in the surrounding area<sup>159</sup> and even within the prison it spread only to “inferior officers”—the “superior officers who lived distinct from the prisoners, were free from it”.<sup>160</sup> The inference seems to be that spread was by direct contamination of food,

<sup>149</sup> *Report*, op. cit., note 11 above, p. 242.

<sup>150</sup> *Ibid.*, p. 69.

<sup>151</sup> *Ibid.*, p. 91.

<sup>152</sup> *Report*, op. cit., note 9 above, p. 2.

<sup>153</sup> *Ibid.*, p. 3.

<sup>154</sup> *Ibid.*, p. 4.

<sup>155</sup> *Report*, op. cit., note 11 above, p. 69.

<sup>156</sup> Latham, op. cit., note 13 above, pp. 146–51.

<sup>157</sup> *Ibid.*, p. 203.

<sup>158</sup> *Report*, op. cit., note 12 above, p. 22.

<sup>159</sup> *Ibid.*, p. 53.

<sup>160</sup> *Ibid.*, p. 46.

probably from a carrier, who in all likelihood was one of the female kitchen staff since the disease continued among the women even after their removal from the penitentiary. It is impossible to be sure of the diagnosis nearly 200 years after the event—there are a large number of possible food- and water-borne agents, including perhaps most probably amoebic or bacillary dysentery or campylobacter, to which the outbreak might be attributed.

We can be certain that the reduction in diet from a (by modern standards) just-about-adequate 2300 k.cal. daily to a meagre 1850 k.cal. did not help (again these figures—which are for the men, the women received less—are estimates but are probably in the correct range). It is self-evident that a poorly nourished patient, who is also suffering from low morale, will fare less well when challenged by any illness than would otherwise be the case. Almost certainly, some of the tuberculosis deaths were accelerated by under-nutrition; and in this context it is significant that latent tuberculosis flared up in a volunteer subjected to complete deprivation of vitamin C.<sup>161</sup> However, the fact that so many of the deaths took place (and that the diarrhoea persisted—particularly among the women) after the dietary had been improved strongly suggests that its reduction was not a major factor in this outbreak of disease.

As to Dr Hutchison, by his own account, his attitude to colleagues at the prison was, to say the least, somewhat acerbic. Shortly before his dismissal he wrote to the management committee:

With respect to what you alledge [*sic*] regarding my differences with the superior officers, that, with the exception of the chaplain (whom I believe to be the author of all these differences, and whom I shall ever consider as having acted a part most unworthy of his sacred function, by stooping to become a spy and tale-bearer, and by having, on a certain occasion, endeavoured to take away my character, by a most unfounded imputation,) I have lived on the best terms with the other officers, to whom I have never given the least cause of offence, unless such occasional admonitions as I was called upon to give, in the conscientious exercise of my duty, particularly to the matron and surgeon, could be so construed.<sup>162</sup>

The giving of admonitions, and his words: “Mr Pratt’s opinion, even in medicine, which he has practised for thirty years, is, as the Committee knows, not worth one farthing” do not suggest a man seeking easy popularity.<sup>163</sup> This assessment of Mr Pratt’s worth was written in relation to a series of statements made regarding one of the justifications later offered for Dr Hutchison’s dismissal: namely that the latter had—inappropriately and whilst under the influence of alcohol—ordered a warm bath for a dying patient.<sup>164</sup> These well-orchestrated accusations were made by Mr Pratt, the matron and the nurses (“the old women” as Dr Hutchison refers to them). Arthur Griffiths (subsequently governor of the penitentiary) spoke of most of the officials resident at the penitentiary as being prone to “Gossip of course—probably worse, constant observation of one-another, jealousies, quarrels . . . subordinates ever on the look out to make capital of the differences of their betters, and alive to the fact that they were certain of a hearing when they chose to carry out any

<sup>161</sup> Carpenter, *op. cit.*, note 5 above, p. 203.

<sup>162</sup> *Further papers*, *op. cit.*, note 57 above, p. 10.

<sup>163</sup> *Report*, *op. cit.*, note 11 above, p. 283.

<sup>164</sup> *Ibid.*, pp. 255–86. The patient in question was Mary Turner, aged fourteen, sentenced to death.

She probably died of tuberculosis, and according to the chaplain, “I have seldom been with so young a person who bore a severe affliction with so much resignation and patience” (*ibid.*, p. 206).



slandrous attack”.<sup>165</sup> Dr Hutchison strenuously denied both charges and his habitual sobriety was attested to by a pantheon of distinguished medical men, including Sir Astley Cooper. Even the maligned chaplain, Dr Bennett, showed Christian charity in testifying that Dr Hutchison had not been drunk at the relevant time. His apparently disturbed state may have been the result of agitation because his sister, as a result of some unspecified misjudgement, had lost £400 of his money. Also, the fact that his front teeth were missing made his speech indistinct at times, perhaps leading to an impression of insobriety.<sup>166</sup> Nonetheless, it suited the committee to accept his guilt; news of the problems in the penitentiary was beginning to appear in the press,<sup>167</sup> and by sacking Dr Hutchison the committee sought to divert attention away from themselves—an aim in which they probably succeeded. They said that Dr Hutchison had “complained of the appointment by the committee of the two physicians to act with him in the prison; and represented this proceeding as unnecessary, and as a great indignity to him”,<sup>168</sup> particularly as they were younger than he,<sup>169</sup> and it was convenient for them to take the opinions of Drs Latham and Roget at face value: “The committee of the Penitentiary certainly heard with much surprize [*sic*], after they had only been told by Dr Hutchison in the course of the month of February of the existence of only a few cases of scurvy within their walls, that 400 cases of that kind were discovered in the investigation which took place in the beginning of March”.<sup>170</sup> By the time assorted experts had cast doubt on the existence of “four hundred cases of that kind” it was too late, Dr Hutchison had already gone and his protestations went unheard. He had been scapegoated.

Health problems at Millbank continued; in 1842 William Baly wrote: “other forms of disease, which were described as parts of the epidemic of 1823, namely the fever, dysentery, and nervous affections, have frequently reappeared”.<sup>171</sup> In 1827 there were nine male and two female deaths, a mortality rate of 1.7 per cent. On the surface this is an improvement on the pre-outbreak figure, but by then the practice of discharging prisoners on medical grounds had crept in and we can be sure that at least a few of the sixty-one males and twenty females pardoned in that year were mortally ill. Ten years after the reoccupation of the penitentiary further statistics were printed (Table 4). Again, so far as the mortality rate is concerned (2.5 per cent), these figures might seem to represent an improvement from the situation prior to 1823 but no such deduction can be drawn because of the unknown nature of the “discharged by medical recommendation” category. William Baly recognized that many such patients were terminally ill and on a case-by-case analysis of 355 discharges on medical grounds from Millbank between 1825 and 1842, suggested that about 35 per cent would have died soon after their release.<sup>172</sup> On this basis, the 1827 mortality rate would double to over 3 per cent and the 1830 to 1834 rate would rise to nearly 4 per cent. This at a time when the mortality rate in most English prisons was in the range of 1 per cent to 2 per cent.<sup>173</sup>

<sup>165</sup> Arthur Griffiths, *Memorials of Millbank and Chapters in prison history, vol. 1*, London, King, 1875, pp. 69–70.

<sup>166</sup> *Report*, op. cit., note 11 above, pp. 255–86.

<sup>167</sup> *The Times*, 4 March 1823.

<sup>168</sup> *Report*, op. cit., note 11 above, p. 117.

<sup>169</sup> *Ibid.*, p. 119.

<sup>170</sup> *Ibid.*, p. 117.

<sup>171</sup> Baly, op. cit., note 92 above, p. 701.

<sup>172</sup> William Baly, ‘On the mortality in prisons and the diseases most frequently fatal to prisoners’, *Medico-Chirurgical Transactions*, 1845, 28: 113–272, p. 116.

<sup>173</sup> Higgins, op. cit., note 102 above, p. 236.

Table 4  
Medical Statistics, Millbank Penitentiary 1830–1834<sup>a</sup>

Year	Average number of prisoners	Number of deaths	Number discharged by medical recommendation	Average number of sick in the infirmaries
1830	458	10	11	27
1831	394	5	6	20
1832	386	17	26	27
1833	443	8	13	25
1834	522	15	13	17

<sup>a</sup>First report from the Select Committee of the House of Lords appointed to inquire into the present state of the several gaols and houses of correction in England and Wales, PP 1835 (438), XI, 1, p. 39.

Contemporaries attributed Millbank's high mortality to the low, damp situation of the prison, although in reality it was almost certainly related to the greater length of sentences served there. Whatever the reason, the (adjusted) death rate remained high. In 1839 from a daily average of 518 prisoners, five died (under 1 per cent), but twenty were pardoned and another four were removed to the hulks, all on medical grounds.<sup>174</sup> By 1845, invalid prisoners were sent to the hulks at Woolwich in order to recover their health before transportation, the designation penitentiary was lost and the prison, having become no more than a holding facility, was closed and demolished in 1892.

Thus, it is not unreasonable to draw the following conclusions. There were a few cases of scurvy in the first few months of 1823 but all apparently responded to treatment. There was an excess number of deaths in the early part of 1823—some twenty more than would have been expected. None of these deaths was due to scurvy; many almost certainly had an infective aetiology originating in the gastro-intestinal tract; the nature of this infection remains uncertain. And finally, the reduction in diet was not the result of lack of concern for the prisoners' welfare on the part of the medical staff, but was an administrative decision taken in response to external pressure. Had medical advice given at the time been followed, the reduction would have been less draconian. Indeed, according to Dr Latham, commenting on a letter written by Mr Pratt to the management committee in March 1822 on the subject of the proposed dietary changes, the latter exhibited preternatural prescience:

The letter contained a prediction that, in the event of the change contemplated being carried into effect, those disorders, which actually did take place, would be the consequence. . . . He was himself accustomed to refer us to this prophecy and its verification, not without some exultation; and indeed, well he might . . . it is one of the most splendid instances of medical anticipation upon record.<sup>175</sup>

<sup>174</sup>*Fifth report of Inspector of Prisons, Home District*, PP 1840 (283), XXV, 1, pp. 211–12.

<sup>175</sup>Latham, *op. cit.*, note 13 above, p. 221.