book reviews

Angel of death – the story of smallpox

By Gareth Williams. Palgrave Macmillan, 2010. 448 pp. £18.99

A visit to any museum focusing on the history of medicine will quickly make clear to any visitor how important infection has been, and continues to be, to mankind. How appropriate it is to have a new book published which coincides with the 30th anniversary of the declaration by the World Health Organization (WHO) of the eradication of smallpox, arguably the greatest coup of medicine of all time, which is probably the only true victory of man over microbe.

This book is written by a professor of medicine whose specialist expertise is in diabetes and obesity, though you would not know this from the detail and thoroughness of the contents. It is written for both medical and lay readership; for those interested in medical history and social history. But equally the book will be enjoyed by someone who just likes to read a good story. The book not only covers the science but introduces the reader to the characters of the story and their relationships with their family and peers in considerable detail. Gareth Williams writes with a great command of the English language and in a style which is comfortable and easy to read and it is no surprise to find that he is an accomplished author of many books, as well as general and humorous articles.

The book initially introduces the disease and epidemiology of smallpox and the variola virus. It leaves the reader in no doubt of the scourge that variola was to mankind over many generations; variola major killed about 30% (sometimes up to 50%) of those infected and left many survivors scarred for life. The pictures in the book also give testimony to the terrible nature of this disease.

The next section is on variolation, the use of infected material from a patient with smallpox to inoculate and hopefully induce immunity in a non immune person, which was still used in some parts of the world in the last century. The reader is introduced to some powerful characters involved in introduction of this technique including Lady Mary Wortley Montague whose drive and passion, having herself suffered and been scarred from smallpox, brought variolation into the UK from Turkey. The Reverend Cotton Mather was similarly a key person in promoting variolation in Boston. Variolation was not without its problems and had a small but significant mortality.

The section on vaccination focuses on Edward Jenner who recognised the protection against smallpox by a person who had had cowpox. The author does mention others who may have used the technique, though from the balance of evidence presented it is appropriate that it is Jenner's name which is associated with this intervention. The spread of vaccination to different parts of the world using a 'human chain' and the progression to a more standardised production and the development of a freeze dried preparation to enable live vaccine to reach areas without a 'cold chain' are described. Throughout the chapters on variolation and subsequently vaccination, the constant and powerful tensions between the protagonists and antagonists of these interventions, driven by professional rivalry, financial self interest or scientific concern, are described. This persisted over the decades driven by people with strong and passionately held views – indeed there is an analogy with the situation of antagonists to immunisation against other diseases in current times, though the risk-benefit ratio of current immunisations is clearly very different.

The section on eradication of smallpox under the WHO programme led by the determined and dynamic DA Henderson illustrates a truly remarkable achievement and the sceptics were truly put in their place by its success. This will hopefully be the final chapter on smallpox, but the comments towards the end of the book about a weaponised virus and the possibility of lack of full containment of any residual virus introduces the reader to the potentially horrifying picture of re-release of the smallpox virus into a non-immune world with potentially devastating consequences.

A good test of any book is whether it is a good holiday read, and whether completing the book is a duty or a pleasure. Having taken it with me to Italy this summer I can truly say that it is an excellent holiday read.

Having read again of the remarkable success of mankind controlling and eradicating smallpox there would seem to be a strong argument for the statue of Edward Jenner, which initially graced a plinth in Trafalgar Square before it was moved in the 19th century, to regain its original position. Jenner may not have drawn all the correct conclusions from his observations, but the introduction of vaccination and the success achieved through this technique will always remain a major achievement for this country doctor from Gloucestershire.

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Jerwood. The foundation and the founders By Matthew Sturgis. Unicorn Press, Norwich 2009. 303 pp. £30.00.

One of our favourite outings used to be to Witley Court in Worcestershire. Its spectacular ruins, huge fountain and extensive gardens were being restored by English Heritage, and when we visited in September 2000 the Sherwood Sculpture Park had just been opened. A dozen sculptures by the likes of Elizabeth Frink, Michael Ayrton and Antony Gormley were scattered 'in a treasure trail of artistic elegance'. We were intrigued.