

The Princes in the Tower, 1483 — Death from natural causes?

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UNTIL RECENTLY the received wisdom has been that the first cases of the acutely fulminating English Sweating Sickness which occurred in London in the late Summer of 1485, were caused by an infection carried by the Norman and Breton mercenaries in the service of Henry Tudor. This belief has been based on sources almost exclusively from the South of England and France, some contemporary such as Forrestier¹ and some of later date.² There are, however, impeccable contemporary sources which demonstrate beyond reasonable doubt that this disease was well recognized, and greatly feared in the North of England, notably in Cumberland, Cheshire and Yorkshire, long before the cataclysmic epidemic of 1485 in London. The records of York³ show that the disease was well-known in the countryside around the city and Lord Stanley, it will be recalled, gave as his excuse for not joining Richard III's army in Nottingham prior to the battle of Bosworth, his fear that he had contracted the fell disease.⁴ Although wrongly ascribing to a variant of the influenza virus the cause of the English Sweating Sickness, Attreed has perceptively conceded the northern provenance of the disease in England.⁵ These sources attest beyond doubt to the existence in the North of England of the English Sweating Sickness long before Henry Tudor's army had embarked in Northern France, let alone landed in Milford Haven. Careful search of the Pembrokeshire archive and relevant documents in the National Library of Wales at Aberystwyth has failed to reveal any evidence of the occurrence of the disease along Henry Tudor's route from Milford Haven to Bosworth. The signs and symptoms of this disease are so striking as not to admit of the possibility of it having been overlooked.

Recently, the whole problem of the causation of the English Sweating Sickness has been re-appraised in the light of modern virology.⁶ The most likely agent would seem to have been an arbo-virus, that is a virus carried, for example, by fleas, ticks, mites; small wild mammalia, such as field-mice, voles, moles, etc., acting, most probably, as reservoirs.⁷ The word 'arbovirus' is an American portmanteau word meaning arthropod-borne; it has nothing to do

with trees. The distribution and demography of the five epidemics in England and the one of 1529-30 in Central and Eastern Europe have been analysed. This lends support to the view that the disease may have emanated from Western Russia. Similar acute infectious diseases, in which spontaneous bleeding is common, still occur in the Ural region and sometimes spread as far westward as Czechoslovakia and Denmark. Immediately after the 1529-30 epidemic all trace of the disease was lost in the wastes of Eastern Europe.' Probably the disease first gained access to England some time before 1485; from the Baltic via the ports on the North-Eastern seaboard. Long enough, maybe, before 1485 for some degree of endemicity to have developed, such as has been shown to have occurred in the epidemic in Devon in 1551.' As is nowadays well known, this change evokes the carrier state in a wide variety of infectious diseases. The rapidly fatal issue of this disease and its nosology have been carefully documented." The fear engendered by the malady was such that careful examination of sufferers was avoided by medical men, who seem to have behaved with the same conspicuous lack of gallantry that Samuel Pepys said they did in the Great Plague of London in 1664. The best and most reliable account is that of Forrestier." He described all the salient features of the disease but significantly mentioned darker patches on a highly flushed face. These could well have been manifestations of spontaneous haemorrhage.

Since he was occupied mainly in the North, and especially in Yorkshire, where the Sweating Sickness was already familiar, there can be little doubt that the Duke of Gloucester would have been aware not only of its virulence and infectivity but also of the terror which it inspired. This overwhelming fear is the characteristic reaction of people when faced with an infectious disease, the signs and symptoms of which are entirely unfamiliar. A new antigenic challenge to an immunologically virgin population selectively attacks the socially better-off males (and to a less extent females) in the prime of life, whereas the very old, the very young, or the otherwise physically frail are, seemingly paradoxically, spared." The reasons for this are known but they need not detain us here. Sir Thomas More, for example, drew Cardinal Wolsey's attention to the severe depredations caused by the Sweating Sickness amongst undergraduates up at Oxford and Cambridge." Since the original eleemosynary principles of the mediaeval universities had long since been abandoned, the undergraduates came, in the main, from well-to-do homes and they were, of course, in the middle or late teens; the age most prone to an hitherto antigenically unfamiliar infectious disease.

Edward V and his younger brother Richard may have died in the Tower of London, in the first half of August 1483," the month of peak incidence of the English Sweating Sickness. Some of their attendants may have come from the North, any of whom, including Richard III himself, could have been a carrier. The Princes, moreover, were not held captive in a squalid environment: They were well fed and housed, relatively luxuriously, in the royal apartments of the Tower of London. Their age, sex and social circumstances were those which characterized many of the victims of the fatal illness. Indeed, if Edward V died in 1483 at the age of thirteen years, he would probably have been well into puberty, given that his dietary and cognate circumstances were privileged well above average: The Duke of York, although on the young side to succumb

would, in the circumstances of the propinquity of his brother, have been vulnerable to a massive exposure to the virus.

If, as seems possible, the English Sweating Sickness killed the Princes, then Richard III's evasive behaviour regarding them after he became King, becomes explicable in a much more favourable light. Might it not be that Richard's hesitancy was genuine? Of crucial importance in this context is the King's failure to display the corpses and then, conspicuously, to distance himself from the entire episode. This behaviour can reasonably be explained in two ways: either the Princes' cadavers showed evidence of external injury or they did not. If they did, Richard would have been blamed for their violent death; if not, he would have been accused of poisoning them. Were the Sweating Sickness the cause of death, then there may well have been superficial haemorrhages, *vide supra*, which would, surely, have been interpreted as evidence of physical violence. It cannot be over-emphasized that, at this time, the English Sweating Sickness and its manifestations were wholly unfamiliar in London and the South of England. Richard would, as a Northerner, have been well aware of the nature of the disease and of the danger it posed. As an intelligent observer, he would have had little difficulty in foreseeing the risks attendant upon the exhibition of the corpses to public scrutiny. He was on the horns of an impossible dilemma. He knew that a fearsome epidemic might follow as a result of an inquisitive multitude being in close contact with the dead children and thereafter departing to mingle with a highly susceptible population. The identical consideration precluded the disposal of the bodies in the Thames.

If we assume that the bones discovered at the foot of the stairs in the White Tower are the Princes', then it can be suggested that they were buried very deeply as a further protection against the spread of infection. The 'osseous reliquiae' were accidentally exhumed during the reign of Charles II." At that time these were thought to be the remains of the Princes allegedly murdered in the Tower by Richard III. They were re-buried, with supreme irony, at the behest of the Stuart King, in the Henry VII Chapel in Westminster Abbey, having first been encased in a marble urn designed by Sir Christopher Wren." Re-exhumed with decanal and capitular permission in 1933, these bones were subjected to meticulous examination by the distinguished surgeon-anatomist, Professor William Wright, aided by Dr. George Northcroft, an orthodontist of repute." Osteological and dental analyses lent impressive confirmation to the view that these were the relics of Edward V and his younger brother. Wright was convinced that the conspicuous staining of the facial bones was due to blood. Ross, in a more recent study, is non-committal in respect of the provenance of these stains." Issue must be taken, however, with Wright's conclusion that the staining of the facial bones as proof of considerable violence. The stains, in all probability, are blood, but Wright's opinion that physical violence perpetrated at the time death was the cause of this bleeding, cannot, without question, be sustained. The sources quoted in support of the theory of a violent death for the Princes are those of Sir Thomas More and William Shakespeare, both, as far as Richard III is concerned, of profoundly suspect integrity. Sir Thomas More, recently revealed as a rather less estimable character than has, hitherto, been almost universally believed, portrays the Princes' alleged assailants, Miles Forrest and John Dighton, as brutal thugs who smothered their victims by

thrusting pillows over their mouths." However, as is well known, feather pillows suffocate extremely efficiently without any tell-tale stigmata of violence and, remarkably, Shakespeare emphasizes the gentleness of the operation.²⁰ Haemorrhagic lesions of the skin and mucosae are common features of those arbovirus diseases which today bear resemblance to the Sweating Sickness and the staining of the facial bones is far more likely to have been caused by extravasation of capillary blood sustained over several hours rather than by violent rupture of a major vessel as maintained by Wright. Any blood flow so engendered would have been staunched within seconds of death by cardiac arrest immediately incident upon suffocation. There is also clear evidence, in Wright's material, of dental and gingival disease, which alone could account for ante-mortem bleeding.²¹ The presence or absence of blood-staining, however, is peripheral to the main argument of this thesis, to which the historical and anatomical investigations of Tanner and Wright lend substantial support.

It would, therefore, seem possible that Edward V and Richard, Duke of York, died in the Tower of London early in August 1483, not as a result of violence but from the English Sweating Sickness, which ravaged London and the South of England epidemically within three weeks of Richard's defeat at the battle of Bosworth.

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