The death of the Black Prince: a case of disease in 1376 that changed the course of English history

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CASE VIGNETTE

A man in his 40s, of high socioeconomic status, suffered from a chronic illness for almost 9 years, characterised by relapsing and remitting episodes. He had an extensive travel history, first becoming unwell after returning from Spain. He had previously been in excellent health, highly active, participating in almost continuous military service since the age of 16 and was heralded as the greatest English soldier ever to have lived. After so many years of warfare without being injured, Edward of Woodstock, the Black Prince, died from disease in 1376. His early demise meant that the crown passed directly to his 10-year-old son after the death of King Edward III. This young King, Richard II, was later deposed and murdered, stimulating over a century of instability, including the Wars of the Roses and the rise of the Tudors. Disease—rather than battle injury—has been the biggest killer during warfare for millennia, and in this instance significantly changed the course of English history.

Illness and death

The Black Prince's illness is thought to have started after his victory at the Battle of Nájera in 1367. He paused in the town of Valladolid, in northern Spain. It was the start of summer and "his army endured sore distress and of hunger, for lack of bread and wine". 1 A chronicle suggested that up to 80% of the Prince's army may have died from "dysentery and other diseases".2 Chandos Herald's Life of the Black Prince documents his movements from Spain to France and reported "Soon after this, the Prince of Aquitaine came to stay at Angoulême, and while he was there, the illness began which lasted for the rest of his life". Before the Siege of Limoges in 1370, he was described as "lying sick

Correspondence to Dr James Robert Anderson, 21 Engineer Regiment, Claro Barracks, Ripon HG4 2RD, UK; james.anderson619@mod.gov.uk in his bed" being carried in a litter to direct the battle¹ (illustrated in figure 1). The Black Prince boarded a ship for his final campaign in 1372 during the failed relief of Thouars, indicating his symptoms may have improved. During 1374–75 there is little account of his movements, suggesting a possible flare up of his illness. He attended the Good Parliament in April 1376, but then fell gravely ill and died on 8 Iune 1376.

The case for dysentery

Most later accounts of the death of the Black Prince suggest that he died from dysentery, possibly amoebic dysentery,

which was prevalent in medieval Europe. It can lead to chronic complications, such as amoeboma, fulminant colitis, toxic megacolon and colonic ulcers. A problem with this theory is that if the Black Prince really had chronic diarrhoea, one might question whether he would have been well enough, or even welcomed, aboard a ship in 1372. There are multiple causes of dysentery, and a recent discovery identified paratyphoid fever as the source of 800 deaths in the city of Lübeck, a prominent trading centre in medieval Europe. Assessment of the skeletons and historical records suggest the year of 1367, the same year as the start of his illness, so it may have been endemic at the time.³ Complications from surviving an episode of acute dysentery could have led to chronic sequela, such as anaemia, kidney injury, liver abscess and/or joint issues (eg, a reactive arthritis, possibly a reason for his periods of immobility). A review in the Iournal of Medieval History also refutes the chronic dysentery theory, instead favouring alternative diagnoses, such as a

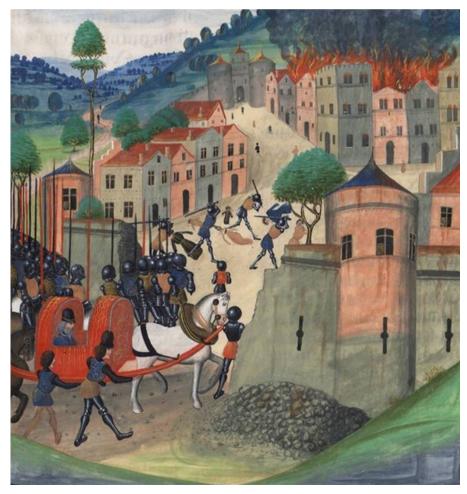


Figure 1 The Capture of Limoges (1370), showing the Black Prince carried on a litter. Jean de Warvin, Chroniques d'Angleterre, late 15th century. Bibliothèque nationale de France.



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Footnotes and end pieces

fistula, nephritis or cirrhosis, or a combination of these.⁴

Other possible illnesses

Later historians refer to "dropsy" (perhaps referring to heart, liver or renal failure) as a cause for immobility at the Siege of Limoges. However, the likelihood that he survived so many years without treatment seems questionable. Lack of water on the hot Spanish campaign may have caused renal stones which would fit with a fluctuating illness with survival over a 9 year period.

Another candidate for the Prince's chronic disease might be inflammatory bowel disease, which may have led to his relapses in symptoms and gradual deterioration. Perhaps this may have also been complicated by perianal pathology, such as fistula. The surgeon John Arderne was on campaign in France at the same time as the Black Prince and wrote the *Treatises of fistula in ano, haemorrhoids, and clysters* in 1376, although no records survive that he ever treated the Black Prince.⁵

Brucellosis, a bacterial infection contracted by eating unpasteurised dairy products or raw meat, was common in medieval Europe, and it is known that these foods were often kept aside for the nobility on military campaigns. It can produce chronic symptoms of fatigue, recurrent fever, and joint and heart inflammation.

In the 14th century, Geoffrey Chaucer wrote of a tertian fever (fever every third day) that may have referred to malaria, specifically Plasmodium vivax, which was prevalent in medieval France and Spain. The dormant malaria hypnozoite parasites reside in the liver and can cause a parasitaemia after months or even years when they re-enter the bloodstream. Symptoms include fever, headache, myalgia, gastrointestinal disturbance, fatigue, chronic anaemia and susceptibility to acute infections, such as pneumonia or gastroenteritis, leading to multiorgan failure and death. This would fit the fluctuating nature of his illness and the decline towards the end of his life. Any anaemia would not have been helped by the purging and venesection treatments of the time.

The Black Prince finally succumbed to disease rather than battle injury despite almost continuous war fighting and life long exposure to violence. There are several diverse infections or inflammatory conditions that may have led to his demise. These might include malaria, brucellosis, inflammatory bowel disease or long term complications of acute dysentery. However, chronic dysentery is probably unlikely. Even in modern conflicts and war zones, disease has caused enormous morbidity and loss of life, something that has remained consistent for centuries. Efforts to protect and treat deployed forces are as important now as in the 1370s.

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