

The Peloponnesian War, fought for decades between Athens and Sparta and their respective allies, broke out in 431 BC. Leading Athenians, including Pericles, the most influential man in Athens at the time, advocated a measure that would come to have disastrous effects: all the people of Attica (the large region in which Athens was located) would take shelter from the invading Spartan army by gathering behind the stout walls of the city of Athens. But Athens was not able to accommodate such a mass of people, and hygienic conditions must have been appalling. What happened would have been predicted by any modern epidemiologist: a vicious plague broke out in 430 BC, and, by its conclusion in 427 BC, about 30 - 33% of Athens' population would fall victim to a horrible death.

The exact nature of this plague has long been a hot topic of debate among ancient historians. While many think that Athens was suffering from an outbreak of the bubonic plague, others have suggested anthrax, smallpox, measles, typhoid fever, scarlet fever, influenza, and even the Ebola virus. All such speculation is ultimately based on an "eye-witness" account of the illness provided by Thucydides, the Athenian author of the famous *History of the Peloponnesian War*. Fortunately for later historians, Thucydides provides a very detailed account of this plague, and his description of its symptoms is especially trustworthy because he himself had the disease. It began suddenly with a high fever accompanied by inflammation of the eyes, mouth and throat, and this was followed by sneezing and hoarseness. Thucydides next describes how pain struck the chest of the victim, producing a strong cough; the stomach became violently upset, producing a great deal of vomiting. Externally, the victims' skin took on a reddish colour and broke out into pustules and ulcers. Internally, victims felt so hot that no clothing could be tolerated; rather, they experienced the urge to plunge their bodies into cold water (Thucydides tells us that some did indeed throw themselves into rain-tanks in the vain hope of relief). Not surprisingly, thirst also tormented the victims, as did the inability to sleep. According to Thucydides, many died at this stage, after seven or eight days of violent suffering. Some, however, endured an even longer agony marked by severe diarrhea. This was generally fatal, but some people did manage to recover, albeit

impaired: we hear from Thucydides of the amputation of fingers and toes, and even of a total loss of memory.

Grim as all this may be, Thucydides claims that "the most awful aspect of the disease was the depression that occurred when anyone first began to fall ill." Such a psychological despair lowered resistance to the disease, almost ensuring that the victim would perish. Yet who could not sympathize with this despair as people watched those around themselves catch the plague and "die like sheep." Indeed, the highly infectious nature of the illness was emphasized by Thucydides: people fell ill while nursing others, so much so that contact with others became avoided. We learn that "many a house was emptied of its occupants for lack of a nurse." Those who had the courage to assist afflicted friends often died as a result of their loyalty. The only people with no fear of the disease were those who had recovered from it: Thucydides writes that "the same person was never attacked twice" by the plague, so we must assume that recovery provided immunity.

Thucydides makes it clear that the doctors of his day were at a loss in dealing with this disease: "a plague of such extent, with such high mortality, could not be recalled, and physicians were not of any help; they were ignorant of how to treat it properly and died themselves in great numbers because they visited the ill most often." He later adds that no single remedy was ever found, "for what helped in one case only made things worse in another." Nor were the gods of any help: "Prayers in temples and divinations were just as futile." In fact, Thucydides tells us that temples were full of the corpses of people who had died seeking salvation in them.

The uniqueness of this plague was confirmed for Thucydides by the observation that birds and animals that normally preyed upon unburied human corpses either abstained from contact with victims of the plague or died after eating their flesh. The historian in fact adds that "there were many bodies that were lying about unburied." This bit of information is important for two reasons: it implies (1) that people were dying at such a rate that normal burial practices had to be suspended, and (2) that some bodies were indeed buried. Finding those buried remains might possibly hold the key to identifying exactly what type of plague this was.

In 1994 and 1995, Efi Baziotopoulou-Valavani, a Greek archaeologist, was afforded an unexpected opportunity to solve the mystery of the plague. At the time, digging was underway in the construction of a subway station in the vicinity of the Kerameikos, the ancient cemetery area of Athens. The subway excavators came upon not only ca. 1000 tombs, but also what looked like a mass grave that dated to the fifth century BC. Baziotopoulou-Valavani was then called upon to perform "rescue archaeology," that is, to excavate and document the site prior to its obliteration by the expanding subway system.

The mass grave (dated by the excavator as between 430 and 426 BC) was found close to the surface, indicating the unusual haste of the burial procedure. In one area about 90 skeletons came to light, all buried in a jumbled manner with no obvious demarcations between the bodies (which included both adults and children). Also found were a number of pots that were intended as burial offerings in accordance with Greek ritual practices. These pots, however, were fewer in number than would normally be expected for such a large number of burials. Moreover, as Baziotopoulou-Valavani has stated, "the mass grave did not have a monumental character. The offerings we found consisted of common, even cheap, burial vessels... The bodies were placed in the pit within a day or two. These factors point to a mass burial in a state of panic, quite possibly due to a plague." These observations fit well with Thucydides' statement that "all burial rites traditionally used were completely upset, and people buried the corpses as best they could."

Skeletal remains can tell us a great deal about people, both in life and in death (for an excellent book on this topic, see William R. Maples and Michael Browning, *Dead Men Do Tell Tales*, 1994). The many skeletons discovered by Baziotopoulou-Valavani and her team, if they are indeed those of fifth century plague victims, might provide us with data that could help to identify with some degree of certainty the nature of this devastating disease. Here, then, is an opportunity for forensic anthropology to come to the aid of archaeologists and ancient historians.

Unfortunately, the mass grave itself no longer exists: subway construction continued, and bulldozers quickly destroyed the ancient site, unnecessarily it now appears: in December 1997 the Greek government cancelled the proposed subway station and its associated tunnel. In a final act of indignity to the dead, the site is now scheduled to house a multistory parking lot! Still, without the initial subway digging the mass grave may have lain undiscovered forever, so, as the old saying goes, "half a loaf is better than none." We now at least have a better chance of laying to rest the debate about the great plague of Athens.