

Still About Francesco de' Medici's Poisoning (1587)



To the Editor:

In 2010, Fornaciari et al¹ detected *Plasmodium falciparum* in the skeletal remains of Francesco I de' Medici (1541-1587), Grand Duke of Tuscany. Francesco and his wife died within a few hours of each other, with the official report giving the cause as pernicious malaria. However, others suspected they had been poisoned by Francesco's brother and successor as Grand Duke, Ferdinando. The Fornaciari group argued that their findings confirmed the official explanation of Francesco's death and removed any suggestion of poisoning, although toxicologic studies published in 2006 had found arsenic concentrations within the lethal range in the remains of Francesco and his wife.²

Information recently discovered in the Vatican Library now adds support to the conclusion of poisoning. Because Ferdinando was a Cardinal, he was required to report his activities to the Pope. The Vatican document includes his account of Francesco's death, which says among other things: "It is believed that his disease was caused by fungi and petechiae with pestilential fever... The Grand Duke was prone to disease, untidy and he had a swollen neck..." Skin

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eruptions (eg, petechiae), fever, and swelling are all symptoms of acute arsenic poisoning.

Francesco's official autopsy reported postmortem signs of arsenic poisoning, such as velvety red congestion of the stomach, and an unofficial report by doctors who witnessed the autopsies of Francesco and his wife refers to a "poison which had corrupted their internal organs."

It is plausible that Francesco had malarial infection, then endemic in Tuscany. But the presence of malaria antigens in human remains does not establish that the person died of this disease, nor does it exclude the possibility that poison was used to ensure death when the malaria might have been nonfatal. On the other hand, the presence in human remains of arsenic concentrations at lethal levels does reliably identify acute arsenic poisoning as the cause of death. Autopsy descriptions and the Vatican document also support this conclusion.

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References

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