

Skeleton DNA reveals surprising backgrounds of Crusader soldiers



By **Ashley Strickland**, CNN

Updated 1517 GMT (2317 HKT) April 18, 2019

(CNN)DNA from 13th century remains buried in a pit in Lebanon is shedding light on the lives of Crusader soldiers and how they mixed with the local population, a new study shows.

Christians invaded and attempted to claim the Near East during the Crusades, a series of religious wars between 1095 and 1291. Although the armies were led by nobility, the soldiers themselves were ordinary men lost to history, and not much is known about them.

"We know that Richard the Lionheart went to fight in the Crusades, but we don't know much about the ordinary soldiers who lived and died there, and these ancient samples give us insights into that," Chris Tyler-Smith, senior study author and genetics researcher at the Wellcome Sanger Institute, said in a statement.

The study was published Thursday in the [The American Journal of Human Genetics](#).

Researchers uncovered 25 male skeletons in two burial pits in Sidon, Lebanon, dating to the 13th century. This is one of the few known Crusader burial sites and an area where major battles raged between 1110 and 1249.

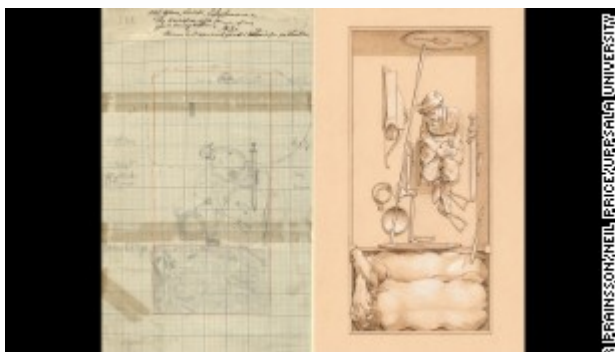


Ancient lovers found in Indian burial site mystify and intrigue archaeologists

The men had been killed violently, presumably in battle, based on the evidence of blunt force injuries on their skulls and bones. Their bodies were dumped in the pit and burned. Carbon-14 dating allowed the researchers to determine that the European shoe buckles and a coin found alongside the remains dated back to the Crusades.

A detached skull was also found nearby; the researchers believe it may have been catapulted into an opposing camp as a way to spread disease or decrease morale.

But they were able to recover DNA from temporal bones and perform whole-genome sequencing to confirm that the men were Crusaders -- quite a feat considering that the bodies had been burned and buried in a warm, humid climate. Both factors cause DNA to degrade.



Iconic Viking grave belonged to a female warrior

The researchers weren't expecting the diverse origins of the men. Some were from Spain and Sardinia, four were locals who were probably recruited to fight, and two carried mixed genetics indicating that they were the result of relations between Crusaders and locals.



The bones of Crusaders found in a burial pit in Sidon, Lebanon.

Some of the soldiers who traveled from western Europe to fight stayed in the newly established Christian states that popped up along the Eastern Mediterranean coast, according to the study. They settled down and had families with locals. As the wars raged on, they also died together in battle.

"Our findings give us an unprecedented view of the ancestry of the people who fought in the Crusader army. And it wasn't just Europeans," said Marc Haber, first author of the study and a postdoctoral fellow at the Wellcome Sanger Institute, in a statement. "We see this exceptional genetic diversity in the Near East during medieval times, with Europeans, Near Easterners, and mixed individuals fighting in the Crusades and living and dying side by side."

Surprisingly, the genetic influence of the Crusaders did not leave a lasting mark on Lebanon. This is in contrast to previous findings regarding invaders during times of conflict, like the Mongols, who were able to spread their genetic lineage, and colonial Iberians arriving in South America. Both of these events forever altered the genetic makeup of the local population.

Ancient Roman DNA reveals modern malaria parasite

For the new study, the researchers sequenced DNA of people who lived in the area during the Roman period 2,000 years ago. It's genetically similar that of to the population today.

"If you look at the genetics of people who lived during the Roman period and the genetics of people who are living there today, you would think that there was just this continuity," Haber said.

"You would think that nothing happened between the Roman period and today, and you would miss that for a certain period of time the population of Lebanon included Europeans and people with mixed ancestry. After the fighting had finished, the mixed generation married into the local population and the genetic traces of the Crusaders were quickly lost."

800-year-old 'Crusader' mummy decapitated at Irish church

The local residents made strong efforts to expel the Crusaders and finally succeeded after a couple of hundred years, the researchers said.

The study provides insight about the kind of things that often aren't included in recorded history.

"Historical records are often very fragmentary and potentially very biased," Tyler-Smith said. "But genetics gives us a complementary approach that can confirm some of the things that we read about in history and tell us about things that are not recorded in the historical records that we have. And as this approach is adopted by historians and

archaeologists as a part of their field, I think it will only become more and more enriching."