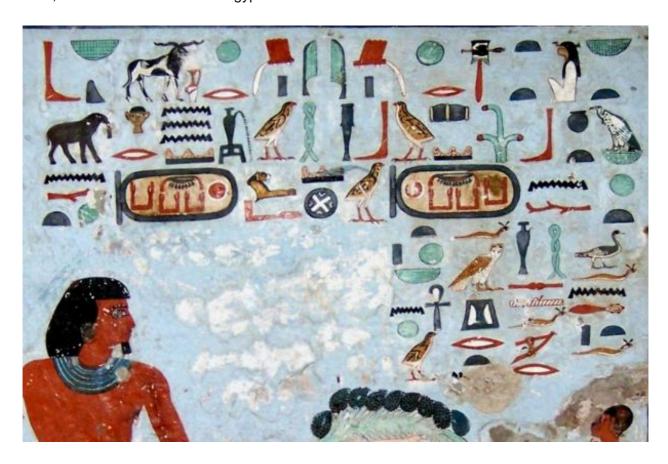
Earliest known breast cancer identified in ancient Egyptian skeleton

A 4,200-year-old skeleton that shows signs of deterioration from cancer is the earliest known case of breast cancer, according to the Spanish anthropologists who uncovered her remains in a necropolis in Egypt. They think the woman's breast cancer metastasized (spread) to her bones.

The find this month in Qubbet el-Hawa near the southern city of Aswan and a Sudanese find in 2014 indicate cancer was present in the Nile Valley region long ago. The woman excavated this month was an aristocrat from Elephantine, the southernmost town in Egypt.



The tomb of Sarenput II in the Qubbet el-Hawa necropolis, near where the remains of an ancient Egyptian woman with cancer were found, included this beautiful mural. (Daniel Csörföly derivative work/Wikimedia Commons)

Though cancer is nearly non-existent in the archaeological record of ancient peoples, now it is the second cause of death worldwide after heart disease.

While the modern lifestyle of rich foods, smoking, obesity and toxins in the environment have been vilified as a leading cause of cancer, some researchers say the fact people are living longer is the primary reason.

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Cancer Research UK says three-quarters of cancer cases are diagnosed in people 60 and older, and 36 percent in people 75 or older. The group's website says:

because of our modern lifestyles. It's because we live longer today than at any point in history. Hundreds or thousands of years ago, life expectancy was short. Many people died in middle age from infectious diseases, and death in childbirth or childhood was also common. ... So it's not surprising that cancer was a rare event in populations where people were unlikely to make it past 40.

While cancer is a modern affliction, there appears to have been some cancer in ancient times. There have been several recent finds of ancient remains of people who had the devastating disease,

Also last year in the Nile Valley, British researchers found the 3,200-year-old skeleton of a man with metastatic cancer in a Sudanese tomb. Until March 2014, there had only been one example of metastatic cancer predating the first millennium BC in human remains.



A researcher examines the 3,200-year-old, cancer-riddled bones of an ancient Sudanese man.

The man's skeleton was found in Amara West, 750 kilometers (466 miles) downstream from the Sudanese capital Khartoum. He was buried on his back in a painted wooden coffin with a glazed amulet. The bones of the 25- to 35-year-old man showed evidence of a malignant soft-tumor cancer that spread. Tests using radiography and a scanning electron microscope provided clear imaging of the lesions on the bones, with cancer metastases on the collar bones, shoulder blades, upper arms, vertebrae, ribs, pelvis and thigh bones.

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Michaela Binder, the researcher from Durham University in England who made the discovery, said that it is impossible to determine the exact site where the disease originated, but that the cause may have been environmental, for example from carcinogens from wood fire smoke, genetic or from the parasite schistosomiasis, which still causes cancer to this day in the area.

In December 2014, researchers announced they'd found the earliest known case of cancer of any kind, a Bronze

Age Siberian skeleton with metastasized cancer.

"The 4,500-year-old bones have significant marks and holes, alerting researchers to the devastating lung or prostate cancer that the ancient man had endured. This new evidence of the illness in ancient bones demonstrates that cancer is not only a modern phenomenon, but also affected the ancient world," wrote Liz Leafloor of Ancient Origins.



4,500 year old bones of Siberian man reveal he died of cancer. Researchers have found what may be the oldest case of human cancer in the world. Credit: Angela R. Lieverse et al.

The remains show the man was 35 to 45 years old when he died. The cancer spread throughout his body, and the deterioration of his bones left him immobile. It was almost certain that those around him would have recognized he was ill. They placed him in a circular grave in the fetal position, his knees drawn up into his chest, and he was buried with a crooked bone serpent spoon, among other items. This type of burial is in contrast to other men at the time who were buried on their backs with fishing or hunting gear.



One of the grave goods associated with the Siberian Bronze Age man - a unique bone spoon with a carved

winding serpent handle. Credit: Angela R. Lieverse et al.

In another case, in October 2014 researchers said they found evidence of cancer in the 2,500-year-old mummy of a woman in what is now the Republic of Altai, Russia. Her remains were excavated from a burial mound in 1993, and the find was considered one of the most significant of late 20th century Russia.

The woman had a primary tumor in the right breast and right axial lymph nodes with metastases. It is not clear whether the cancer was the ultimate cause of her death as she also suffered from osteomyelitis, an infection of the bone or bone marrow, and significant injuries, including fractures of the skull, which may have been caused by falling from a horse. But one thing is for certain, the feeble Ice Maiden, as she is called, would have been suffering a great deal of pain.

As well as the sarcophagus with the mummy, six horses richly saddled and harnessed and two warriors were found indicating that the woman came from a noble clan. The Altai Princess and the two warriors found with her are believed to have been nomadic Pazyryk people.

Featured image: Researchers have unearthed what they believe to be the world's oldest breast cancer. (Egypt Antiquities Ministry)

By Mark Miller