

Herod's Diseases

Gruesome death for brutal Biblical ruler

25 January 2002

By [Emma Young](#)

King Herod the Great, the bloody ruler of ancient Judea, died from a combination of chronic kidney disease and a rare infection that causes gangrene of the genitalia, according to a new analysis of historical records.

“The texts that we depend on for a close description of Herod’s last days list several major features of the disease that caused his death – among them, intense itching, painful intestinal problems, breathlessness, convulsions of every limb, and gangrene of the genitalia,” says Jan Hirschmann, professor of medicine at the University of Washington, in Seattle.

It had been suggested that complications of gonorrhoea caused Herod’s death in 4BC, at the age of 69. But a systematic analysis of reported symptoms suggests otherwise, Hirschmann says.

He found that chronic kidney disease accounted for nearly all the features of Herod’s illness – except the genital gangrene. “I finally concluded that the most likely explanation was that his chronic kidney disease was complicated by an unusual infection of the male genitalia called Fournier’s gangrene,” Hirschmann says.

Brutal and ruthless

Only about 500 cases of Fournier’s gangrene have been recorded in the medical literature. It is caused when *Staphylococcus*, *Streptococcus* or *E. coli* bacteria infects and starts to rapidly kill cells, turning tissue black.

Historical texts record Herod’s 36-year reign as brutal and ruthless. He had three of his sons murdered, and according to the Bible, ordered the slaughter of all boys in Bethlehem aged under two, in an attempt to kill the infant Jesus.

Hirschmann presented his research at the Clinical Pathologic Conference in Baltimore, US. Since 1995, the annual conference has examined the cause of death of famous figures, including Alexander the Great (typhoid fever from a contaminated pork chop) and Edgar Allen Poe (rabies).

Read more: <https://www.newscientist.com/article/dn1844-gruesome-death-for-brutal-biblical-ruler>

Researchers Diagnose Herod the Great

By Amanda Onion

January 7, 2006, 7:51 AM

Jan. 25, 2002 -- He was a ruthless man who died a miserable death.

More than 2,000 years after Herod the Great succumbed at age 69, doctors have now settled on exactly what killed the king of ancient Judea: chronic kidney disease complicated by a very uncomfortable case of maggot-infested gangrene of the genitals.

The clues to Herod's diagnosis were listed in ancient history books and, according to Jan Hirschmann, the lead diagnosing doctor in the case, included "intense itching, painful intestinal problems, breathlessness, convulsions in every limb and gangrene of the genitals."

Rare Affliction

Hirschmann, who is a physician at the Veterans Affairs Puget Sounds Health Care System in Washington state, said chronic kidney disease could explain nearly all of Herod's symptoms. However, he said the king's case of gangrene (now a rare condition known as Fournier's gangrene) could not be explained by kidney disease and was "unusual."

Hirschmann suspects one of three conditions likely introduced Fournier's gangrene to the leader's "privy parts." An infection in Herod's abdomen could have spread to his groin and rectal areas (Herod is said to have complained of abdominal pain).

He may have sexually contracted gonorrhea, which could have led to an infection of the urethra — the tube connecting the bladder to the outside world. This infection could have cause urine to leak inside the king's body, spreading bacteria.

Finally, since reports indicate the king "had a terrible desire to scratch himself," this scratching could have introduced gangrene directly into the area.

Records also indicate the swelling at the leader's groin was further wracked by an infestation of worms. Hirschmann says what may have looked like "worms" could have actually been shredded pieces of skin, although, he says there is a possibility they were real.

"There could have been maggots feeding on the tissue," said Philip Mackowiak, chief of the Medical Care Clinical Center at the Veterans Affairs Maryland Healthcare System, who oversees an annual conference at the center to diagnose historical figures. "It's tough to know how long he was suffering but it was probably months, possibly a couple years."

Paranoid Tyrant

Some might say Herod, who died in 4 B.C. deserved an unpleasant end.

Flavius Josephus, a Jewish historian who wrote about the infamous king roughly 100 years after his death, described the leader as a productive, successful builder in his youth who became increasingly paranoid and ruthless during the final decade of his 36-year reign.

"The main problem was he married too often and each wife produced princes who schemed to be No. 1," said Paul Maier, a professor of ancient history at Western Michigan University who published a book about Josephus' writings. "It turned Herod into a tyrant and the house of Herod into a can of worms."

Herod the Great eventually killed three of the sons from his 10 wives. When the brother of his favorite wife, Mariamme, roused his suspicions, he invited the high priest to a swimming party and, during a rough game of polo, had his men drown the brother.

Next, Herod ordered the killing of Mariamme's grandfather and finally, suspecting Mariamme had betrayed him, he killed his most beloved wife.

The leader is probably most notorious for the "Massacre of the Innocents," as described in the gospel of Matthew. When, upon hearing that a new king of Jews had been born in Judaea, Herod ordered the killing of all male infants of Bethlehem aged 2 years or younger.

When he realized his own death was imminent, Herod directed his sister to assemble the leading men of distinction from all parts of the nation into a large arena and ordered they be killed as soon as he died.

"This was to discourage any celebrations at his death," explained Maier. "At the time he was a walking encyclopedia of disease."

Hot Oil Therapy

In an effort to fend off his afflictions, Herod the Great summoned the nation's best physicians to his side. The medical team decided to place the king in a tub of hot oil, which, needless to say, didn't help and even temporarily blinded him.

"At that time they believed that health and disease all depended on the interaction of the four vital humors — blood, black bile, yellow bile and phlegm," said Mackowiak. "So presumably they thought the oil bath might help cure this imbalance of his vital humors."

A couple thousand years later, contemporary doctors were discussing what might have been proper treatments for the king, including kidney dialysis and surgical removal of his gangrene, at a special clinical pathologic conference today at the University of Maryland School of Medicine. Each year Mackowiak selects a new historical figure to discuss possible diagnosis and treatment. Last year's subject was the Roman Emperor Claudius.

"I think the exercise teaches doctors to be humble," said Mackowiak. "We can see how every generation of medical scientists are absolutely convinced they have found the answers. But it's apparent that this is a field that requires constant learning."