While much of modern medicine has been focused on cancer, it is not an exclusively contemporary phenomenon. Many classic biblical accounts in Tanach can be explained or understood with contemporary scientific knowledge on cancer. Ancient stories that personify heroism, spirituality, and the triumph of good over evil become empirically and scientifically fascinating when looked at through the lens of modern medicine. Through examining several classic examples, we can explain some of the mystique associated with many biblical tales and connect to them in relevant, scientific ways.

One classic story in Tanach is the tale of David’s triumph over the giant Goliath. From a young age, children are taught how the future King of Israel triumphed over the towering, menacing figure of this Philistine giant. Yet how did Goliath get to be this giant? According to one medical theory, Goliath suffered from a condition known as acromegaly, which is caused by an excess of growth hormone. His gigantism was a symptom of macroadenoma (large tumors located near the pituitary gland), which is characterized by a hypersecretion of growth hormone during childhood. Finally, Goliath suffered from a visual disorder. While David carried only one stick, Goliath saw several. The theory is that Goliath was suffering from visual field restriction, which has been seen with large pituitary macroadenomas due to pressure on the optic chiasma [1]. This theory also explains how David was able to kill Goliath with one stone shot at his forehead. In acromegaly, the frontal sinuses become enlarged, causing the frontal bone to be thinner, weakening the barrier and allowing the stone to pass through. The stone then lodged itself in Goliath’s enlarged pituitary gland and caused a pituitary hemorrhage [2]. This knocked Goliath unconscious, where after David was able to kill him via decapitation.

Another classic biblical story that can be explained using modern medicine is that that of King Jehoram. The story goes that God caused him to have an incurable disease of his bowels, and, after two years, his bowels fell out, ultimately killing him. One theory states that Jehoram suffered from colorectal carcinoma, or colon cancer. Because the text explicitly states states that the disease was incurable and that he died because of it, most other causes for his bowel issues are applicable, with colorectal cancer probably the most likely of his death. Additionally, it is most likely that Jehoram reached stage 4 cancer, which is characterized not only by tumors in the body, but also metastases to other organs of the body, which likely contributed to the malignancy of his disease and his ultimate death [3].

One last biblical account that can be further understood using modern medicinal tactics is the case of Titus. The story goes that a gnat invaded his brain, and, for seven years, it lived within his skull, finally killing Titus. Rabbinic Sages taught that when they cut open his head, the gnat was the size of a small bird. Since there is hardly enough space in the intracranial region to accommodate a bird of any size, this must be interpreted differently in order to make sense of it. The Maharal suggests that Titus died of a brain tumor [4]. This is consistent with the understanding of the Sages, that God chose the smallest of agents (generally understood as a gnat) to undermine the biggest of dictators. This small agent was symbolized by a gnat but was not necessarily an actual gnat. It is possible that the tumors slowly grew in his brain, weakening him further and further, ultimately killing him. The marvel that the Sages seem to have at the size of the gnat after cutting open Titus’ head could be the marvel of the size of the tumor that had taken over his brain [4].

While in no way exhaustive, these three stories demonstrate how modern science and technology, specifically knowledge of cancer, can further our understanding of ancient accounts in Jewish tradition. By looking at these stories through the lens of modern medicine, we can view these stories not as archaic fairy tales, but as relevant, powerful accounts that affect us even in contemporary times.

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References: