

The Medical Significance of a Broken Heart in Tanach

By Tamara Morduchowitz

Cardiovascular disease is the number one cause of mortality in America. These diseases often involve a blockage of one or more blood vessels, which are responsible for supplying the heart with oxygen. As a result, there is a lack of oxygen reaching the heart, and that leads to death of cardiac muscle. This blockage is usually the result of an acute plaque rupture which occludes the artery. Such lesions can also cause cardiac arrhythmias which disrupt the normal heartbeat and can cause death (1). There are many subtle references to cardiac disease in the *Torah*. By going through different sources in the *Tanach*, one is able to connect these cases to possible cardiac disease.

One of the more famous *Midrashim* explained Sarah's death in *Parshat Chaya Sara*. It was written, "Sarah died in *Kiriath-arba*, which is *Hebron*" (Gen. 23:20). *Rashi*, Rabbi Shlomo Yitzchaki, who was one of the most well-known *Rishonim*, explained that Sarah died when the *Satan* told her that Avraham brought their son as a *Korban* to God. When Sarah heard the news, her "soul left her and she died." Dov Eliach, in the *Sefer Peninim Mishulchan Govohab*, quoted Rav Chaim Shmulevitz who questioned this story. Why did Avraham make it through the *Eikadab*, but Sarah who had just heard about it, quickly passed away? Rav Chaim Shmulevitz answered that God gradually informed Avraham about the *Eikadab* over a period of time, but Sarah received that news suddenly, which induced a heart attack. The *Peninim Mishulchan Govohab* explains that suddenly hearing shocking news can trigger death by a heart attack. Medically speaking, it is known that high stress has a significant impact on the body, especially the heart. Sudden stress or trauma can release stress hormones, such as cortisol and epinephrine. The release of these hormones trigger metabolic changes, which increase oxygen demand on the heart and raise blood pressure, both of which can induce myocardial infarction (1).

Interestingly, the Talmud *Sanhedrin* (107a) notes that when God tests humans, He gives them extra strength to be successful. God gave this strength to Avraham, but Sarah was not allotted extra strength. The *Mahari* explains that just before the messenger

had a chance to tell Sarah that Yitzhak, her sole son, was not killed, her soul departed due to sudden shock. Thus, Sarah, not Yitzhak, became the ultimate sacrifice.

Sarah was honored with an entire *Parsha* named after her death. Interestingly, the *Parsha* is called *Chayai Sarah*, "the life of Sarah." Rabbis teach that when *tzadikim* die, their *Neshamos* still live on by being remembered for their righteous deeds. Additionally, it is important to note that Sarah, someone so holy and connected to God, died just like anyone else, showing that even great people can die through natural means such as a heart attack.

The story of Nabal and Avigayil (Shmuel 1, 25) also gives insight on cardiac complexities. Nabal is described as a rich selfish man, married to a good righteous woman, Avigayil. The story describes that when King David and his soldiers fled from King Saul, they asked Nabal for food and water. Nabal harshly rejected King David's request and insulted David. King David got upset and considered attacking Nabal. Without her husband's knowledge, Avigayil prevented her husband from being killed by bringing food and water to King David and his army. She asked King David to accept her gifts and requested for no bloodshed to occur, and David agreed. When Avigayil told Nabal what she did, the *Pasuk* notes, "His heart died inside him and became like a stone" (Shmuel 1, 25:37).

The manner in which the *Tanach* describes that Nabal's heart died within him and turned to stone from the shocking news parallels what happened to Sarah, and is similarly consistent with the medical dangers of stress on the heart. Dr. Moshe Steier quotes the medical historian, J. O. Lebowitz, who described Nabal as an unhealthy eater and a heavy drinker with a bad temper. After his wife told him what she had done, anxiety from the loss of his money and property triggered a myocardial infarction and he subsequently died 10 days later, possibly from a second heart attack (2). A small amount of alcohol may be protective to the heart by decreasing the amount of blood clots, but chronic alcoholics, such as Nabal, have an increased risk of congestive heart

failure and multiple vitamin deficiencies. Long term alcohol use is capable of damaging every organ in the body. The cardiovascular dangers of alcohol have been known for over a hundred years to be detrimental to health (3).

It has been taught that heart attacks are a modern disease related to the stress of everyday modern life and were not as prevalent in ancient times. However, there is little data to indicate that modern day stress is different than the stress encountered thousands of years ago, even with people's different lifestyles and diets. Reginald Magee sites research on the ancient Egyptian bodies preserved by embalming. Scientists found that the mummies exhibited various types of cardiovascular disease. They found calcifications in the aorta, femoral and carotid arteries and at the base of the brain. Microscopic examinations showed cases of cholesterol deposits, arteriosclerosis (scarring of the arteries), plaques and fibrous tissue in the blood vessels. These clinical lesions are common in patients with coronary heart disease. There were also writings on papyrus paper, which described small swelling of vessels consistent with an aneurysm. These lesions that were found in the ancient Egyptians seem very similar to cardiac disease found nowadays (4).

The causes of these cardiovascular diseases are unclear. As per this article, there is no evidence of common causes of heart disease such as tobacco, pollution, and certain diseases, such as syphilis, in ancient Egypt. Alcohol does not seem to be a major

factor in heart disease because in studies of Muslims who did not drink alcohol, heart disease was still evident (4). Therefore, Nabal's death may not be solely from alcohol use, but may also be a result of other factors such as meat consumption and stress (4). This indicates that stress may be a large factor in ancient and modern day heart disease.

While Sarah and Nabal both died from possible heart attacks, one was a noble person and one was not; this shows that heart disease does not differentiate between good people and bad people. Although the stress that caused Sarah's life to end is somewhat different than the shock factor received by Nabal, Nabal's age and unhealthy lifestyle made him more prone for death. The examination of the mummies also serves as tangible evidence that cardiac deaths and heart disease could have occurred thousands of years ago.

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