

# Diabetes and The Ebers Papyrus

## 1552 B.C.

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The Ebers Papyrus was found between the legs of a mummy in the Assisif district of the Theben necropolis. The exact tomb of origin is unknown, and it is not recorded that the tomb suggested that the occupant was a physician. The Papyrus was purchased in Ledor by Edwin Smith in 1862, who sold it to George Ebers, a well-respected Egyptologist in 1872. Ebers published a facsimile in English and Latin in 1875. It is believed to be the oldest preserved medical document dating from 1552 B.C. The Papyrus is 30 cm in height and 20.23 m (66'4") in length. The Papyrus is divided into 110 pages. It is written in the hieratic script. It contains chapters on helminthiasis, ophthalmology, dermatology, gynecology, obstetrics, dentistry, and surgery. There is a short section on psychiatry, describing a "depondency" that seems very close to our concept of depression. More than 700 magical formulas, including incantations and folk remedies, are described. Of great interest to endocrinologists is the opinion that in the Ebers, Papyrus is the first known medical reference to diabetes mellitus. The reference is to a

single phrase: "... to eliminate urine which is too plentiful."

"Unfortunately, the crucial word, *asha*, can mean both 'plentiful' and 'often,' and it is unclear whether the condition described was polyuria (increased volume of urine) or increased frequency of micturition, very often due to cystitis. The latter condition is much more common and therefore the more likely interpretation."<sup>1</sup>

The medicine of the Egyptians was referred to by the Greeks as essentially conservative, ie, without innovation from the medicine of the early dynasties. Herodotus wrote that "medicine is practiced among them on a plan of separation; each physician treats a single disease, and not more; thus the country abounds with physicians, some undertaking to cure the diseases of the eyes, others of the head, others again of the teeth, others of the intestine and some of those which are internal."<sup>6</sup>

Galen and Hippocrates both refer to a period of study at the temple of Imhotep in Memphis. Interestingly, in their subsequent writings, neither refers to diabetes in a way we would consider sufficient to describe the disease. Their descriptions do not go beyond that contained in the Ebers Papyrus.

Then, circa 100 A.D., appears the description by Aretaeos of Cappadokia. "Diabetes is a wonderful affliction, not very frequent among men, being a melting down of the flesh and limbs into

urine. The patients never stop making water, but the flow is incessant, as if the opening of aqua ducts. Life is too short, disgusting, and painful, thirst unquenchable, excessive drinking, which, however, is disproportionate to the large quantity of urine, for more urine is passed; and one cannot stop them either from drinking or making water; or, if for a time they abstain from drinking, their mouth becomes parched and their body dry, the viscera seems as if scorched up; they are affected with nausea, restlessness, and burning thirst, and at no distant term they expire."<sup>7</sup>

This is truly the first accurate description of the disease and, at least for me, represents the first clear recognition of the disease. Nonetheless, the Ebers Papyrus is a most riveting document revealing an astonishing medical sophistication in the Nile River Valley 3500 years ago.

### REFERENCES

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**FIGURE 1.** Imhotep was the “royal chamberlain” of King Netjerkhet, also known as Djoser, the third dynasty. Imhotep is believed to be the architect of the oldest surviving major stone building, the step pyramid. Imhotep was also a skilled physician, referred to by the Greeks as the Asklepios of the Egyptians, and elevated to a God, “son of Ptah” by the time of the 27th dynasty. Note the scroll in the left hand, on the left knee, the position in which the Ebers Papyrus was found when it was disinterred from its tomb.