



History of Ancient Egyptian Obstetrics & Gynecology: A Review

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ABSTRACT

For its time, the study and practice of medicine in Ancient Egypt was revolutionary. Primitive by today's standards, physicians in Egypt nonetheless showed great initiative and impressive knowledge of the human body and its inner workings, as well as the treatment of illness and disease. Surgical intervention was never recommended, and the main treatment modalities provided by the "swmw" (pronounced sounou, physicians) that did exist would be deemed bizarre by today's standards. Gynecological disorders such as uterine prolapse were treated with medications rather than by manipulation. It was thought that if the patient stood over a burning fire of ingredients, her uterus would be magically forced back into its normal position. Excessive bleeding, or menorrhagia, was treated by remedies designed 'to draw out the blood of the woman' – the rationale being that if you were to draw the blood out, the bleeding would stop. Of particular concern to the Egyptians was the ability to predict whether or not a woman was capable of becoming pregnant. One method described that the likelihood of becoming pregnant was proportional to the number of times the woman vomited while sitting on a floor covered in beer mash. Another instructed the woman to place an onion bulb in her vagina overnight – if the odor of the onion could be smelled on the woman's breath by morning, then she was considered fertile. Once pregnant, numerous methods were then employed to predict the sex of the newborn.

Key words: Obstetrics, Gynecology, Menorrhagia

INTRODUCTION

The practice of obstetrics and gynecology, as we know it today, is carried out by a highly specialized practitioner who combines both medical and surgical skills with the ultimate goal

being to ensure the health of women during both pregnancy and after. The approach to women's health, however, in the ancient world, particularly Egypt, was somewhat different.

Obstetrician/Gynecologists in Ancient Egypt

As avid record-keepers, the Ancient Egyptians chronicled a great deal of their knowledge on **papyrus** scrolls. Some of these **papyri** still exist today, and we have been able to translate them somewhat accurately, and learn a great deal about the study and practice of medicine in Ancient Egypt. Some of the papyri are quite famous, including the *Edwin Smith Papyrus*, though of as one the principal record on Ancient Egyptian medicine. The *Ebers Papyrus* (dating back to approximately 3000 B.C.) is another papyrus containing a wealth of general information, including faith healing, information on skin diseases, stomach ailments, medicines, the head, dentistry, gynecology, and diseases of the extremities.

It is well known that certain *swnw* (pronounced *sounou*), the physicians who provided most of the medical care in ancient Egypt, had additional titles suggesting that they specialized in treating various parts of the body: Physician of the Eyes, Physician of the Belly, Shepherd of the Anus.¹ Of the Egyptians, the Greek historian Herodotus wrote: "The practice of medicine they split into separate parts, each doctor being responsible for the treatment of only one disease. There are, in consequence, innumerable doctors, some specializing in diseases of the eye, others of the head, others of the stomach, and so on; while others, again, deal with the sort of troubles which cannot be exactly localized."² This, however, does not seem to be the case for practitioners in the fields of obstetrics and gynecology in ancient Egypt, as there are no known words for midwife, obstetrician or gynecologist from this time period.³

Tests of Fertility and Pregnancy

Children were considered a blessing in ancient Egypt. Sons and daughters took care of their parents in their old age. They were often called "the staff of old age," that is, one upon whom the elderly parents could depend upon for support and care. The scribe Ani instructed that children repay the devotion of Egyptian mothers: "Repay your mother for all her care. Give her as much bread as she needs, and carry her as she carried you, for you were a heavy burden to her. When you were finally born, she still carried you on her neck and for three years she suckled you and kept you clean."

It was also expected that the older son or child carry on the funerary provisioning of the parents after their death. Children had value in ancient Egypt. The Greeks, who were accustomed to leaving infants exposed to the elements, were stunned to observe that every baby born to Egyptian families were cared for and raised. This care was not easy. Many children died to infection and disease. There was a high rate of infant mortality, one death out of two or three births, but the number of children born to a family on average was four to six, some even having ten to fifteen.

The Kahun, Berlin and Carlsberg papyri contain an extraordinary series of tests for fertility, pregnancy and to determine the sex of the unborn child. These tests cover a wide range of procedures, including the induction of vomiting and examination of the eyes. Perhaps the most famous test says: to see if a woman will or will not bear a child. Emmer and barley, the lady

should moisten with her urine every day, like dates and like sand in two bags. If they all grow, she will bear a child. If the barley grows it will be a male, if the emmer grows it will be a female, if neither grow she will not bear a child. Of particular interest to the Egyptians was whether or not a woman was capable of becoming, or was indeed, pregnant. One of the more famous tests, taken from the Berlin medical papyrus, is described as follows: "...test to see if a woman will bear a child or if she will not bear a child. Emmer and barley, the lady should moisten with her urine every day, like dates and like sand in two bags. If they all grow, she will bear a child. If the barley grows, it means a male. If the emmer grows, it means a female. If they do not grow, she will not bear a child."³ In a modern botany laboratory in Cairo, Ghalioungui and his colleagues carried out a trial⁴ of this Egyptian test, which seems to be more of a test for pregnancy rather than fertility, and determined that non-pregnancy urines and roughly half of the pregnancy urines arrested germination. The researchers concluded that "...when growth occurs, the urine is presumably that of a pregnant woman, but the reverse is not necessarily true."⁴ The ability of the test to predict the newborn's gender, however, was not so successful, with only 19 of 40 cases being correct, a result which one might expect to have occurred due to chance alone.¹ One method described that the likelihood of becoming pregnant was proportional to the number of times the woman vomited while sitting on a floor covered in beer mash. That the early stages of pregnancy are often accompanied by nausea and vomiting might lend some degree of validity to this particular test.

Another method instructed the woman to place an onion bulb in her vagina overnight – if the odor of the onion could be smelled on the woman's breath by morning, then she was considered fertile.⁵ Although the Egyptians were correct in thinking that obstruction of the uterus would make it impossible for a woman to bear a child, the latter test reveals the erroneous Egyptian view of anatomy at the time, that the cavity of the uterus was somehow connected to the digestive tract.

Delivery took place in special surroundings, on the cool roof of the house, or in an arbor or confinement pavilion, a structure of papyrus-stalk columns decorated with vines. A mattress, headrest, mat and cushion and a stool were arranged in the area. At delivery, only female helpers were present, not physicians. The peasant women called two women either from their households or neighbors, and wealthier classes would have servants and nurses present. There are no known words in ancient Egyptian for midwife, obstetrician, or gynecologist. Women delivered their babies kneeling, or sitting on their heels, or on a delivery seat. This was indicated even shown in the birth hieroglyphic. Often, hot water was placed under the seat, so that the vapors would ease delivery. Delivery sayings were repeated, such as one that asked Amun to "make the heart of the deliverer strong, and keep alive the one that is coming."

Diagnosing pregnancy

The researchers note that one method of diagnosing pregnancy in ancient Egypt was to count the number of times the woman vomits when placed on a mash [mixture] of beer and date. "The aversion of strong aromatic odors, nausea with or without vomiting, is also specified today as a presumptive evidence of pregnancy,"

Obstetrics

Knowledge of anatomy was rudimentary but precocious diagnosis of pregnancy was practiced. An obstetrical chair had been used since the VIth dynasty. The Egyptians were the first to describe prolapsus of the genital organs. The pessary was a known treatment. Spermicidal mixtures were used for contraception. Although there is little mention of treatment for problems that might arise at the time of delivery in the medical papyri of ancient Egypt, there is evidence to suggest that a group of remedies were used to "release a child from the belly of a woman," and "to cause a woman to give to the earth"³ – statements presumably meaning to begin contraction of the uterus and thereby hasten the birth process. The Ebers Papyrus suggests a number of remedies, including ground corn, celery ground in cow's milk, and hemp ground in honey, all of which were inserted into the vagina. Remedies that were taken orally included wine, date juice, and fresh salt of Lower Egypt.

The *swmw* did not in fact attend to women giving birth, rather there were typically two to three women who would assist during labour, particularly if the pregnant woman was of noble lineage. Delivery usually occurred with the woman squatting on two large bricks or on a chair from which the center had been removed – the hieroglyph for 'birth' aptly depicts the newborn's head emerging first with the woman seated in such fashion.⁶ Assessment of the neonate was, by today's standards, quite crude. The Ebers Papyrus⁷ states: "...if, on the day the child is born, it says 'ny' it will live and if it says 'mebi' it will die." It was also thought that if the child moaned or turned its head downwards, it would also surely die. The Ebers Papyrus also provides instructions on what to do should injury to the perineum occur during birth: "Instructions for a lady suffering in her pubic region, her vagina and the region of her vagina which is between her buttocks. You shall say concerning her: Very swollen due to giving birth. You should then prepare for her: oil to be soaked into her vagina." In this particular situation, if the only concern was pain and swelling, then perhaps oil applied to the region may have had some therapeutic effect. But had there been any trauma, such as tearing, then surgery would have been the only effective treatment. As will be discussed below, surgery was not known to be employed by the *swmw* of ancient Egypt.

Contraception

The researchers say ancient papyri include several recipes for intra-vaginal contraceptives, with ingredients including acacia gum, sour milk, and acacia spikes. Compounds derived from the acacia tree/shrub have been found in modern-day research to be spermicidal, with a sperm-immobilizing effect *in vitro*. It has been suggested that such active ingredients may have been indirectly identified when herders of domesticated animals noticed that animals that grazed on certain plants failed to reproduce. As in our society today, in ancient Egypt there too was an occasional desire to prevent conception. The Kahun Gynecological Papyrus, the oldest surviving of the medical papyri, provides instructions for preparing numerous contraceptives to be inserted into the vagina. Pessaries made of sour milk, honey with a pinch of natron, and also of acacia gum were commonly used. Acacia gum has been shown to have a spermicidal effect in the presence of vaginal lactic acid.⁵ A most peculiar practice involved the use of crocodile dung – contraception in this case would have undoubtedly occurred by way of deterrence of the man!

Gynecology

In ancient Egypt there were no known words for midwife, obstetrician, or gynecologist. But because ancient Egyptians did not have words for these things does not mean that they did not exist. In Ancient Egypt the midwife came in many forms. For peasants the midwife was a friend, neighbor, and/or family member who helped deliver the baby. For noblewomen and wealthier classes the midwife was usually a maidservant or nurse who already lived in the household. Midwives at this time did not have formal training to learn their trade. Instead they learned by apprenticeships where the knowledge was passed down from family member to family member or from friend to friend. The work of the midwife included providing emotional support, encouragement, medical care, and religious help and protection to women during their lives. The areas that midwives focused on were pregnancy, labor, fertility, and contraception. Gynecological disorders such as uterine prolapsed were treated with medications rather than by manipulation. It was thought that if the patient stood over a burning fire of ingredients, her uterus would be magically forced back into its normal position. Alternative methods included drinking specially prepared remedies, and smearing oils and aromatic resins on the pubic region.³ Excessive bleeding, or menorrhagia, was treated by remedies designed "to draw out the blood of the woman"^{7,8,9} – the rationale being that if you were to draw the blood out, the bleeding would stop. The Kahun Gynecological Papyrus provides instructions for a victim of rape: "Instructions for a woman suffering in her vagina, and all her limbs likewise, having been beaten. You shall say concerning her: This has loosened her uterus. You should then prepare for her: oil to be eaten until she is well."³

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