

# Two Cases of Lithopedion in Ancient Greece

## **Mercedes López Pérez\***

Departamento de Enfermería. Universidad de Murcia, Spain

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#### **ABSTRACT**

In the present work we are going to demonstrate how the references in one of the most important Greek Stelae from Epidaurus, that tells the case of two women, Cleó and Ithmónica, who have a pregnancy that lasts for years, can be identified with a pathology that today we call lithopedion. The difficulty in knowing when a woman became pregnant and how long a pregnancy lasted is a theme that is present in Greek medical literature. The writings of Hippocrates, Aristotle, and Soranus of Ephesus reveal this difficulty, and how we will see allude to a disease called mola. We identify this pathology with the formation of a lithopedion [1].

**KEYWORDS:** Incubatio; lithopedion; Asklepios; Epidauro; Iamata; Mola; Long pregnancy; Abaton; Apolo; Enkoimèsis

## **METODOLOGY**

In the first place we are going to point out the Greco-Roman medical texts that allude to a pathology that indicates a pregnancy that lasts for years. Below we describe the characteristics of a lithopedion, an asymptomatic pathology, which is found accidentally when performing surgery, or in radiological studies of the abdomen and pelvis. Cases have been documented in Africa, the Northern Cape, Israel, Tanzania, Brazil, Tehran, and Nigeria.

## INTRODUCTION

The stelae of the Greek sanctuary of Epidaurus, of which we only keep four [1] today, were at the entrance of the abaton, or sacred place, where pilgrims, sick, through the incubatio were healed by the god Asclepius [2]. The sanctuary of Epidauros was located in a strategic place, in the Hieron valley, Argolis peninsula, where the place names related to the legend of the god are still preserved today. The village of Koroni remembers his mother, the hill of Tithion owes its name to having been suckled by a goat, and the hill of Kynortion was where the temple of Apollo Maleatas was located. The sanctuary was made up of a set of various constructions that made up the route through which the pilgrims circulated until they reached the room where they had to spend the night, to be healed. The most important building of the sanctuary was undoubtedly the abaton or adyton (sacred, hidden, forbidden place) or room of the enkoimèsis, a large arcaded room divided into two sections, in which the believers would spend the night inside a room. The original abaton was a building with an almost square plan and surrounded, at least on three of its sides by closed corridors: it probably must have been built during the second half of the 6th century BC.

The excavations began in the middle of the seventeenth century, although systematically from the nineteenth century [3]. The temple has provided more than a thousand inscriptions in addition to the iamata (miraculous healings) that can be dated throughout the fourth century. More than a hundred votive dedications by individuals or groups have also been documented in which expressions and formulas are repeated, in which only the name of the dedicator and the deity are substituted. The most important epigraphic testimony is made up of the miraculous cures or iamata, stories preserved in the stone stelae found in the abaton of the sanctuary of Epidaurus, of which only four have been preserved, and two of them very deteriorated.

## DISCUSSION

The diseases named in the stelae of Epidauros are part of religious medicine, hence they have been considered miracles [3]. In 1931 Herzog [4] published a German translation of the Epidaurus iamata with an important text criticism, as important for historians of medicine as for historians of religion. The edition and

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Address for correspondence: Mercedes López Pérez, Departamento de Enfermería. Universidad de Murcia, Spain

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translation of Emma and Ludwig Edelstein [5] and its subsequent reissue in 1998 is the best-known work on the cult of Asclepius. The publications of recent years have insisted on the importance of archaeological sources such as the work of Melfi [6] and Riethmüller [7]. Lidonnici's English [8] translation raises the importance of oral tradition and the analysis of other sources that intervened during the process of story formation. Girone's Italian translation includes in addition to the inscriptions from Epidaurus, those from Athens, Lébena, Pergamon and Rome [9]. One of the most recent and innovative works is the epigraphic and paelopathological analysis of Pêtre and Charlier [10]; Martzavou analyzes the emotions of these miraculous healings, a very impressive work [11]. The expansion of the cult of Asclepius is studied by Wickkiser [12] who justifies the increase in consultations with the god due to the doctors' rejection of incurable diseases. Our work aims to complete the analysis of some of these cures from the comparative study of texts and current pathological findings.

## The Iamata About Long Pregnancies

The inscriptions about these long pregnancies say:

«Kleo was pregnant for five years. After she had been pregnant for five year she came as a suppliant to the god and slept in the abaton. as soon as she left it and got outside the temple precints she bore a son who, inmediately after birth, washed himself at the fountain and walked about with his mother. In return for this favor she inscribed on her offering: "the wonder is not the size of the plaque, but the act of the god: Kleo bore a burden in her stomach for five years, until she slept here, and he made her"».

«A three year pregnancy. Ithmonika of Pellene came to the sanctuary for a family. Sleeping here she saw a vision. It seemed that she asked the god if she could conceive a daughter, and Asklepios answered that she would and that if she asked anything else that he would do that as well, but she answered that she didn't need anything more. She became pregnant and bore the child in her stomach for three years, until she came again to the god as a suppliant, concerning the birth. Sleeping here, she saw a vision. The god appeared, asking whether everything she had asked had not happened and she was pregnant. She had not asked anything about the birth, and he had asked her to say whether there was anything more she needed and he would do it. But since now she had come to him as a suppliant for this, he said he would do it for her. Right after this, she rushed out of the abaton, and as soon as she was outside the sacred area, gave birth to a daughter» [5,8].

This pathology is cited in the first gynaecological writings of the Hippocratic Treatises [13] although they insist more on the treatment than on the clinic of the disease. For the Hippocratic doctor, the mole originated because the uterus received a thick and sickly semen. The most complete information on this disease can be found in the History of Animals [14], where the case of a woman who was pregnant for three or four years, until she had intestinal discomfort, and gave birth to a voluminous mass of meat, is described. The biologist points out that this disease occurs rarely, is a kind of prolongation of pregnancy, and usually continues until old age or death; Sometimes, and fortunately, it is usually found by chance, appearing as a pathology secondary to intestinal pain. The causes of the mola are due to heat and to the fact that the sperm emitted by the couple does not mix, resembling a hollow egg. The hardness of this dough is described in a very graphic way, it cannot be cut with an axe, and this characteristic of the mola is due to the fact that it is the product of incomplete cooking. This information about the mola appears in the texts of the gynaecologist and obstetrician Soranus of Ephesus [15] who speaks of it as if it were a millstone, due to the difficulty of movement and its weight. Also, Oribasio de Pérgamo [16], doctor and personal friend of the emperor Julian, in his medical encyclopedia dedicated to the emperor reproduces the text of Aristotle with some variety. Oribasio recounts the case of a woman who, after having sexual intercourse with her husband, believed she was pregnant and stayed that way for 3-4 years, and the woman, after suffering severe dysentery, gave birth to a piece of meat called mola.

Hydatidiform mole is currently a gestational trophoblastic disease, which is caused by the abnormal formation of placental tissue or trophoblast. This pathology is characterized by the transformation of the placental tissue into another tissue that forms vesicles or cysts and that in the higher stages resembles a bunch of grapes. The frequency of appearance is one case every 2000 pregnancies; 100% is completely cured, since the cells that form it are very sensitive to medical treatment and reproductive capacity is also preserved.

## The Lithopedion

Lithopedion is a rare evolution of a retained abdominal ectopic pregnancy; it can occur mainly if the fetus is large enough to prevent its expulsion or absorption, then it begins to petrify, hence its name. This calcification occurs subcutaneously and is usually wrapped in adhesions (scar tissue). The mother's immune system eventually recognizes the fetus as a foreign object and, to protect her from infection, reacts by coating the fetus with a "calciferous" substance as the tissues die and dehydrate [17].

Cases of lithopedion occur in medical literature from the XVI-XIX centuries; Statistics confirm that for every 1,000 ectopic pregnancies, 9.2% are abdominal, which corresponds to 1 in every 1,000 births. It is a strange phenomenon that for it to occur the following conditions must be met: extrauterine pregnancy, fetal death after 3.5 months of pregnancy, the egg must be sterile, there is no early diagnosis, remain in aseptic conditions, the local conditions must exist for the precipitation of calcium [18]. The initial course of this pregnancy is the same as for intrauterine abdominal pregnancies until fetal death; then the dehydration of the tissues occurs, the infiltration of calcium and a process of petrification begins.

The formation of extrauterine pregnancies is frequent, but not the formation of lithopedion, since control policies during the first months of pregnancy, in most developed countries, prevent its formation. The accidental findings of lithopedion found in recent years have been documented thanks to the movement of women to hospitals with advanced radiodiagnostic technologies. The fourth condition, the non-existence of an early diagnosis, can currently only occur in underdeveloped or developing countries, in those countries that do not have health care for pregnant women and where women do not have controlled pregnancies, conditions are very similar to those that could occur in Archaic Greece.

Cases of lithopedion found throughout the medical literature have appeared in places such as: Africa [19], North Cape [20], Israel [21], Tanzania [22], Brazil [23], Tehran [24], Nigeria [25].

### CONCLUSION

The presence of long pregnancies in texts such as the Hippocrates Treatises, Aristotle, Oribasius and Soranus shows that this disease was not an exaggeration of the priests of the god Asclepius of Epidaurus. Currently there are countries that do not have early care in pregnancy, and in some women lithopedion is formed. What shows that this pathology is the one that the women of the stelae of Epidaurus could suffer from?

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