

The earliest known case of a lithopaedion

Jan Bondeson MD LicSc

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A lithopaedion, or stone-child, is a dead fetus, usually the result of a primary or secondary abdominal pregnancy, that has been retained by the mother and subsequently calcified. This paper describes the earliest known case of this phenomenon. It was discovered in 1582, at the autopsy of a 68-year-old woman in the French city of Sens, and described in a thesis by the physician Jean d'Ailleboust. The woman had carried her lithopaedion for 28 years. In this historical vignette, the lithopaedion of Sens is compared to later instances of this phenomenon. The ultimate fate of the lithopaedion specimen, which was widely traded throughout Europe in the 1600s before finally ending up in Copenhagen, is traced.

INTRODUCTION

On May 16 1582, in the city of Sens, the 68-year-old Madame Colombe Chatri breathed her last. She was the wife of Loys Carita, a tailor, described as being of small stature, but otherwise 'bien formé & corpulent'. Twenty-eight years earlier, Madame Chatri had, for the first time, shown signs of pregnancy. Her menstruations ceased, her breasts swelled, her stomach increased in size, and she could even feel the child move within her. Some time before her birth was due, Colombe Chatri was seized by violent labour pains. A great quantity of amniotic fluid, tinged with blood, was passed.

In spite of the predictions of the Sens midwives, however, there was no childbirth; instead, her labour pains ceased, the movements of the child could no longer be felt, and her breasts diminished in size. Afterwards, Madame Chatri felt quite unwell, and she had to remain in bed for three full years. She could feel a hard tumour of considerable size, situated in the lower abdomen. Until the end of her life, she complained of tiredness, abdominal pains and loss of appetite. Only by means of provoking the appetite with herbs and vinegar sauces could she eat anything at all. When gossiping with her neighbours in the street, they talked about her strange obstetrical mishap, and there was much speculation that she still had a fetus within her, and that it would kill her one day. Madame Chatri and her husband consulted several physicians and surgeons, but none of them could suggest a cure.

THE STONE-CHILD

In 1582, at the age of 68, Madame Chatri was described as being broken down by disease and old age. She died that

year, and since there had been much gossip about her mysterious pregnancy many years ago, her husband requested that her body was to be dissected by two skilful surgeons, Claude le Noir and Jehan Couttas. At first, they thought that she had suffered from 'une tumeur scirrheuse'. They cut through the stomach and peritoneum, and viewed the prodigious growth, which was wrinkled and formed like a turkey's crest. It was hard and brittle like a shell, and covered with what seemed like scales. The surgeons 'plunged their razors into it', but without being able to penetrate the hard shell. After wearing out the edge of their knives on the hard tumour, they fetched mauls and a drill, and finally succeeded to break it. They felt the head and right shoulder of the lithopaedion, but it was not until they had broken off a large portion of the covering shell, and seen the wonderful sight inside, that they understood what they were dealing with.

They ran to fetch some physicians, Jean d'Ailleboust among them. He could see a glimpse of the lithopaedion, which was covered by detritus and the remains of its inner membranes, and was as astonished as his surgical colleagues. All the time, curious townsmen came running in to see this prodigy. The surgeons were busy telling the story, and to demonstrate the infant more clearly, they grasped the opening in the calcified shell with their iron hooks to tear it apart. After tearing with all their force, they broke it open, and took out the lithopaedion, which they set out to dissect further. This was done with great haste, and Jean d'Ailleboust deplored that they had made it impossible to study closer the anatomy of the calcified shell and the nourishing vessels. The shape of the lithopaedion was roughly that of its rounded, calcified shell. The knees were bent, and the legs drawn up towards the chest. The feet and lower legs were fused by the calcific deposits. It could clearly be seen that the fetus was of the female sex. The head was

slightly tilted to the right, and supported by the left arm. The right arm extended down towards the navel: its hand had been broken off through carelessness when the lithopaedion was extracted. The bones of the head were transparent, and the fontanelles were not closed. The skin of the head was partially covered with hair. The lithopaedion had one sole tooth, situated in the lower jaw.

SCIENTIFIC RECORDS

Not long after it had been delivered, the stone-child of Sens became one of the foremost curiosities of France. People travelled hundreds of miles to see and admire it. Jean d'Ailleboust needed no encouragement to write a thorough Latin pamphlet about it, detailing the case history of Madame Chatri as well as the autopsy findings¹. It was published in 1582, by the Sens printer Jean Sauvigne, and soon became a medical best seller. For the benefit of the curious populace, who did not read Latin, his colleague Simeon de Provancheheres translated the entire work into French². The larger part of Jean d'Ailleboust's thesis was dictated to a long-winded explanation, in the manner of the time, of the causes underlying the calcification of the fetus.

He also supplied a curious drawing (Figure 1) of the lithopaedion and its 'mother'. It is believed to depict the corpse of Columba Chatri lying on a richly padded bed, her abdomen dissected to show the lithopaedion *in situ* within its calcified shell. Beside the bed, the lithopaedion is laid out on a pillow. The woman seen on the drawing seems far younger than the 68-year-old Columba Chatri. Considering her rather life-like but languid pose, far unlike that of a half-dissected corpse, it is possible that the woman figure was copied from a contemporary erotic drawing, on which the lithopaedion and the anatomical details had later been superimposed. This practice was not unknown at the time: for example, the obstetrical illustrations in Charles Estienne's *De Dissectione Partium Corporis Humanis*, which was published in 1545, owe much to the erotic drawings of Perino del Vaga, a pupil of Raphael³. Jean d'Ailleboust's illustration resembles those of Charles Estienne, with the woman luxuriously spread out on an ornamental bed with pillows, but the original is not to be traced among the figures used by Estienne. Jean d'Ailleboust himself cryptically adds that the drawing was made in imitation of the works of Phidias, the ancient Greek sculptor². It should be noted that several versions existed of this illustration, with varying background: in one version, the window was shuttered, while in the French translation of the pamphlet, the bed and many other details differed greatly. In the drawing reproduced in several later Latin reissues of the pamphlet, the background had an open window with a cliff, a castle and a landscape.



Figure 1 The lithopaedion of Sens, from the original thesis of Jean d'Ailleboust

The famous Ambroise Paré was a contemporary of Jean d'Ailleboust, and he had occasion to see and examine the lithopaedion, which was figured in his *Des Monstres et Prodiges*⁴ (Figure 2a). His drawing was probably made soon after Jean d'Ailleboust's pamphlet had been published, and it remains the best sketch of what the lithopaedion really looked like. Although Jean d'Ailleboust was very unwilling to part from his great treasure, it is recorded that, in the late 1500s, it was purchased by a wealthy merchant, Monsieur Prestesiegle, who put it in his famous private museum of curiosities in Paris. It was examined there by Madame Louise Bourgeois, the leading French midwife of her time⁵. Later, the lithopaedion was purchased by Etienne Carteron, a wealthy Paris goldsmith. He sold it, in 1628, to Gillebert Bodëy, a jewel merchant of Venice. Two formal documents of sale were drawn up. In these, six Paris burghers certified that the stone-child was the same one described by Ambroise Paré and exhibited for many years in the museum of Monsieur Prestesiegle. In the early 1640s, it was seen in Venice by Thomas Bartholin, the famous Danish anatomist. He was evidently much impressed by the lithopaedion, stressing that the price paid for it by its present owner had been a very good one⁶.

Probably, Thomas Bartholin told his Royal master, King Frederick III of Denmark, about the stone-child he had seen in Venice. In the early 1650s, the King was building up a large cabinet of curiosities at his castle in Copenhagen. In 1653, Frederick III bought the stone-child from its owner in

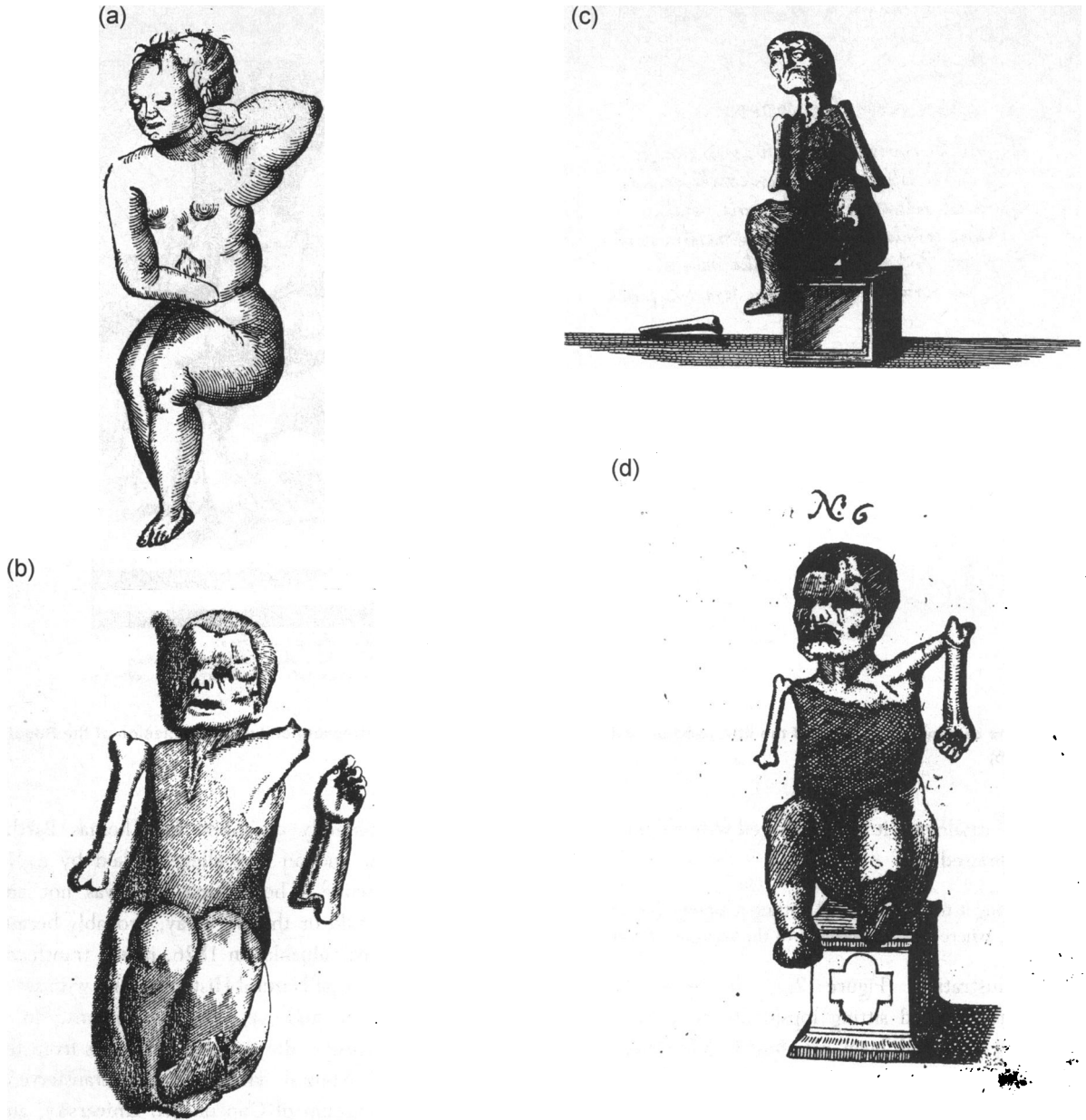


Figure 2 The four existing drawings of the lithopaedion of Sens: those by Ambroise Paré (Ref 4) and Thomas Bartholin (Ref 9) and the 1696 and 1710 drawings published by Holger Jacobsen (Refs 7, 10)

Venice. The document of sale and certificate signed in 1628 were also turned over to the King, as well as a hand written copy of Jean d'Ailleboust's autopsy report, with a slightly different illustration (Figure 3): they are still kept in the Royal Library of Copenhagen (Gl kgl Saml No. 1641). The sum paid was a well-kept secret, but it is unlikely that the Franco-Italian merchant let the King have it cheaply, particularly since he had himself paid a very high price for it. According to Jacobsen⁷, writing in 1710, the price was 1000 Danish riksdaler; according to a later Danish writer⁸ it was 1000 guilders. A few years later, Thomas Bartholin described the lithopaedion closer in one of his collections of anatomical anecdotes⁹. By this time, it had become much the

worse for wear, and it is likely that during its years in private hands, the lithopaedion had not always been treated with the reverence due to its age and fragility. Both arms were now broken off, the jaw was injured, and the skin lacerated (Figure 2b). At some sites, the gypsum-like muscles were badly worn (probably by the lithopaedion being examined by so many hands) and the skeleton visible. The one sole tooth still remained in place. Unlike Jean d'Ailleboust, Thomas Bartholin gives some idea of the actual size of the lithopaedion: it was the size of a fetus at full term.

The lithopaedion remained in the Royal museum for many years. It was mentioned in the extensive museum catalogues of Thomas Bartholin's nephew Holger Jacobsen.



Figure 3 The original (?) drawing of the lithopaedion, with the accompanying poem. (Reproduced with permission of the Royal Library of Copenhagen)

In the 1696 catalogue, it was honoured with a figure, and the King was praised

... for bringing it to Denmark and putting it among the curiosities of his museum, where it was subjected to the scrutiny of learned men.

In the illustration (Figure 2c), the miserable-looking specimen is depicted sitting lopsidedly on a box. Part of the missing arm had been refastened, but otherwise, the lithopaedion was unchanged since it was described by Thomas Bartholin. In Jacobsen's 1710 catalogue¹⁰, it was more thoroughly described. The skin was now missing in large parts, and where it remained, it was quite black, giving the lithopaedion a strange aspect, as if it had been partly dressed. The orbits were empty, and the right side of the lower jaw separated from the upper one. The flesh of the right arm had been worn off, but the humerus was still remaining (Figure 2d). In the briefer 1737 catalogue, it is stated that the lithopaedion was now kept in a glass box, probably to preserve it from further rough handling. In 1770, the lithopaedion remained at the Royal museum, which was by then a rather rundown establishment, the successors of Frederick III not sharing his predilection for natural curiosities¹¹⁻¹².

In the 1820s, the Danish government decided to dissolve the Royal museum, and many preparations were scrapped or sold by public auction. Many bizarre pieces changed hands under these circumstances; among them the hand of a

mermaid, solemnly described by Thomas Bartholin 170 years earlier, and an egg allegedly laid by a Norwegian peasant woman¹². The lithopaedion was not among the preparations sold or thrown away, probably because it was still considered valuable. In 1826, it was transferred to the Danish Museum of Natural History, along with several other human, animal and vegetable specimens. In the late nineteenth century, the remaining exhibits from the Danish Museum of Natural History were transferred to the Zoological Museum of Copenhagen University, and a good many zoological specimens are still there. However, the lithopaedion had disappeared somewhere along the way, together with the other medical curiosities from King Frederick's museum, among them a dicephalic child preserved in spirits, and a minute fetus, alleged to be one of the 365 children of the prolific Dutch countess Margaret of Henneberg. The lithopaedion is not at the Zoological Museum of Copenhagen, nor has it ever been there. Some Danish antiquaries suspect that the director of the Museum of Natural History in the mid-1800s, Professor Reinhardt, disliked the old-fashioned specimens from the Royal museum, which he considered unfit for a modern scientific establishment. It may well be that the lithopaedion of Sens was scrapped at this time, along with the other older medical specimens, of which no trace remains. An extensive search for them in the existing Danish museums has been fruitless.

OTHER CASES

A lithopaedion is defined as the calcified remains of an (extrauterine) pregnancy, carried, usually in the abdominal cavity, beyond the normal period of gestation. In the medical literature, more than 290 cases have been described: the condition seems to be getting rarer except in developing countries, since the resulting extrauterine pregnancy is usually discovered at an earlier date¹³⁻¹⁶. In the review by Küchenmeister, 47 cases occurring before 1880 were described, the lithopaedion of Sens the earliest among them¹⁷.

In the lithopaedion material collected by Tien, the mean age of the mothers, at the time the lithopaedion is discovered, was 55 years, but several of them were octogenarians, and the oldest to date exactly 100 years old¹⁴. A good many of them had carried their lithopaedions for quite a long time: the mean duration of lithopaedion tolerated was 22 years, and nine of 128 women had carried them for more than 50 years.

An abdominal lithopaedion did not prevent several of the women from subsequently bearing normal children. Küchenmeister defined three subgroups of lithopaedion formation¹⁷. In the lithokelyphos, or stone sheath, category, calcification occurs mainly in the membranes, and does not involve the fetus itself. In the lithotecnon, or true lithopaedion, group, the fetus itself is infiltrated with calcium salt deposits after it is deposited into the abdominal cavity after the rupture of the membranes. Finally, in the lithokelyphopaedion group, both fetus and sac are calcified. In a large lithopaedion material, 26, 43 and 31%, respectively, belonged to these three categories. Of 114 lithopaedion cases, 74 were the results of tubal pregnancies, while 13 originated in ovarian pregnancies: these lithopaedions were located intra-abdominally after the rupture of these parts. Eight lithopaedions were the results of primary abdominal pregnancies, and five lithopaedions originated in the horn of a bicornute uterus¹⁴. The fetal age of the lithopaedion is often difficult to estimate, due to drying up and shrinking of the fetus: it should be noted, however, that 43% of the cases were described as being at term.

The lithopaedion of Sens was in many respects a typical lithokelyphopaedion. The mother was 68 years old and had carried it for 28 years: furthermore, the symptoms caused by the lithopaedion were typical, with the sense of a heavy, hard abdominal tumour as the major complaint. What is odd is that Jean d'Ailleboust without hesitation declared that the lithopaedion had been situated in the intact uterus. The great majority of modern cases have been located intra-abdominally, and only a few in one horn of a bicornute uterus; no entirely intrauterine lithopaedion has been described during the 1900s.

It is evident from the original report that the dissection of Columbe Chatri was performed rather hastily, and it remains a strong possibility that two surgeons mistook the calcified shell around the lithopaedion for a uterus. It is well known that the uterus of a woman with an intra-abdominal lithopaedion is often much atrophied. It should be noted, however, that the efflux of amniotic fluid *per vaginam* would imply that the fetus, at that time, was in its natural position. In his thesis on lithopaedion formation, Kieser thoroughly discussed the problem of the intrauterine lithopaedion¹⁸. He accepted the reality of this phenomenon, on the strength of two cases, described in the eighteenth and nineteenth centuries. One of these was well substantiated and much resembled Jean d'Ailleboust's case report, the woman having carried the lithopaedion for 14½ years.

In many modern reviews on lithopaedion formation¹³⁻¹⁶, it is stated that the original case was described in 1557 by Israel Spach. In fact, the work in question appeared in 1597: it was the well-known anthology *Gyneciorum*, where Jean d'Ailleboust's thesis was reproduced. This mistake, which originated with Gould and Pyle¹⁹, has unfortunately been widely disseminated. Although the lithopaedion of Sens was without doubt the earliest recorded instance of this phenomenon, it is by no means the only one of its kind: some of the others are still kept in pathological museums. The lithokelyphopaedion of Leinzell in Germany had been retained for 46 years before being discovered post mortem in a 91-year-old woman. It was kept in the Stuttgart Museum of Natural History before being studied further by Kieser¹⁸, who sawed it in two to examine its structure. Another German lithopaedion was described by Nebel in 1770 and later preserved in the pathological institute of Heidelberg²⁰. If the lithopaedion of Sens had been preserved to this day, it would have been a treasure to any medical museum, and the circumstances concerning its disappearance in the mid-nineteenth century, when it was already more than 250 years old, can only be described as gross vandalism.

D'AILLEBOUST FAMILY

If the ultimate fate of the lithopaedion of Sens is unknown, what about the man who described it? According to a historian of the d'Ailleboust family, there were two brothers both named Jean d'Ailleboust: both were successful medical practitioners²¹. The elder brother was the one who described the lithopaedion. He was city physician of Sens as well as physician-in-ordinance to the Duke of Alençon. The younger, more famous, brother was the physician of King Henri IV.

It is odd that two brothers had the same Christian name, and even odder that they were both Royal physicians; the Duke of Alençon was a Royal Duke and the youngest son of Catherine de Medici. It would seem more reasonable that

the two presumed brothers were one and the same person, and that the physician of the Duke of Alençon later held the same appointment at the court of Henri IV. What seems to prove this argument is that in 1601, Caspar Bauhin (quoted by Céard⁴) described the Jean d'Ailleboust who had described the lithopaedion as 'protomedicus regis'. Furthermore, Madame Bourgeois⁵, who knew the protagonists of the case, clearly identified the discoverer of the lithopaedion as the same man who later became a Royal physician, and Fortunion Liceti mentioned that the same Jean d'Ailleboust 'postea Henrici Quarti Architros fuit'²². According to the court chronicles, Jean d'Ailleboust began his labours as the King Henri's physician in 1593, when he was already quite an old man: it is unlikely that he was born later than 1518. In 1594, he was ordered to examine Gabrielle d'Estrées, the King's mistress, who was feeling unwell. When the King enquired what ailed her, Jean d'Ailleboust bluntly said that she was pregnant. The King was furious, to say nothing of Mademoiselle d'Estrées, but the elderly physician did not budge: he even had the effrontery to predict, much to the King's displeasure, the exact day the Royal bastard would be born. Very near the day he had predicted, on June 7 1594, Gabrielle d'Estrées was delivered of a healthy boy, the future César de Vendôme. Jean d'Ailleboust did not have long to enjoy being right: he himself died under highly mysterious circumstances on July 24 the same year. According to the chronicles of Sully and d'Estoile, he was poisoned by the spiteful Gabrielle d'Estrées. The King grieved the death of his honest old physician, and regretted that he had spoken harshly to him before^{21,23}.

A beautiful Latin poem was written by Jean d'Ailleboust in 1582 to celebrate the lithopaedion of Sens. He recalled the classical myth that after the Flood, the world was repopulated by the two survivors, Deucalion and Pyrrha, who walked the earth, throwing stones behind them, which, on striking the ground, became living people:

Pinxit Deucalion saxis post terga repulsis
 Ex duro nostrum marmore molle genus:
 Qui fit ut infantis, mutata sorte, tenellum
 Nunc corpus saxis proxima membra gerat!

An English translation may be attempted:

From the rocks Deucalion had dropped behind,
 was fashioned the living flesh of humankind:
 How was it then done, that a tender babe well formed
 was, by reversal, into solid rock transformed?

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