LITHOPÆDION. — A HISTORY OF A CASE, WITH NOTES OF ELEVEN OTHERS.

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THE term Lithopædion - stone child, literally - seems to be involved in more or less confusion. We even find a reference made to Dr. Lithopædion. But, bearing evidence rather of ignorance than mistake, are references to cases which are doubtless ones of mummified fœtus, or adipocerous formation, and not lithopædion. The latter term should be restricted to cases of extra-uterine fœtation, and to those few cases of intra-uterine fœtation where, through either accident or disease the products of conception are dislodged into the abdominal cavity, in which the fœtus is then retained, and its tissues become the seat of a deposition of lime salts. The steps by which this change is effected, briefly stated, are an absorption of the watery constituents, a fatty and colloid degeneration of the morphological elements of the fœtus, resulting in a mortarlike (mörtelartiges) mass, composed of the phosphate and carbonate of lime, cholesterine, and blood-pigment, which, still retaining the shape of the fœtus, gradually lessens in size, becoming dryer and more pultaceous. It is a calcification, and not an ossification. A full and rounded result of these changes is rarely seen, as years are necessary to their comple-But some of the fœtal appendages respond either easier or earlier than others, and here may be found, even after the lapse of a comparatively short period, evidences of calcification; such must be found before the term Lithopædion can be properly applied. The literature on the subject is remarkably scanty. This is hardly to be wondered at when the infrequency of the accident-is considered, as well as the fact that such cases, of necessity, endure through a long period of years, and notes taken early in the case are usually unobtainable at the autopsy. I am especially sensible of this latter difficulty, as the case which fell into my hands was, during the pregnancy which resulted in lithopædion, under the care of a most careful and intelligent observer, who, suspecting the nature of the case, took copious notes, which, when most needed, could not be found. The increasing rarity of this accident is probably due to the great advance's made in abdominal surgery, - operative taking the place of expectant treatment in these cases. Although the subject is of almost no importance from a clinical point of view, still, I have thought the collection of the reports of such cases as could be found might be of

interest. In looking up the references, especially those from the German, I am greatly indebted to Dr. J. W. Klinghammer, of Boston.

CASE I.

Is reported by Dr. Brandt, in the Edinburgh Medical Journal for 1862: -

Miss A.	was born					1778		
"	was married					1795, at	the age	of 17
**	first child					1796	**	" 18
	second child					1801	**	" 23
**	pregnant	•		*	٠.	1804	**	" 26
4.4	third child	•	•			1808	**	" 30
	fourth child			÷		1815	4.6	" 37
	died .					1858	**	· · 80

No history of the third pregnancy. The autopsy was performed September, 1858. The tumor weighed 1.8 kilos, 20.32 c.m. in length, 13.33 c.m. in diameter, 40.64 c.m. in circumference. It was a bony cyst containing a fœtus, head uppermost, looking to the left and downwards. The spine and back were in apposition with the right side of the cavity; the head was decidedly compressed; the cord could be distinguished passing round the neck; the whole body was twisted in its long axis

CASE II.

Is reported by Dr. Conant, in New York Medical Journal, May 10, 1865, page 140.

So far as known the pregnancy, which was the first, was normal, laborpains came on at the usual time, lasted a few days, and subsided. Subsequently she was afflicted with profuse and most offensive perspiration, which was almost unbearable to her attendants. After a time this disappeared, and slow recovery ensued, attended by a hard tumor in her side, which caused her no inconvenience other than a sense of weight. Subsequently, she gave birth to three children. In June 1863, 35 years after the accident, she died. The autopsy revealed a calcified fœtus, extra-uterine, seemingly, not enveloped with, or in, membranes; another hard mass, said to have been the uterus, was found in the abdomen, this, however, contained the remains of the placenta, in the opinion of Dr. Conant.

CASE III.

Is reported by Dr. Parkhurst in Medical Times and Gazette, vol. 1, 72, p. 655.

She became pregnant in 1802; nothing unusual about the pregnancy was noticed; the catamenia ceased entirely; foetal movements appeared at the usual time. Premature labor was begun at 8½ months, as the effect of a fright. The pains gradually subsided, and for two or three weeks she was comfortable. Her health then began to decline, and for 1½ years she was an invalid. After this period there was a gradual restoration to a condition of comparative health, though she was subject to attacks of severe abdominal pains at irregular intervals. She died in 1852, at the age of 77. The autopsy disclosed a tumor, the external surface of which was smooth and hite, and composed of fibro-cartilage. Its weight was 3.6 kilos. There was r connection with the Fallopian-tubes or omentum. The external surface of the formula was encrusted with an earthy substance.

CASE IV.

Is reported by Dr. Hans Chiari, Vienna Med. Presse, vol. 17, No. 38, page 1092. In this case symptoms of pregnancy were observed in 1827; but no birth followed them; the patient died at the age of 82, of pneumonia. At the autopsy the tumor was found to be attached to the walls of the uterus. It was about the size of a man's head, and here and there, over its surface points of calcification could be detected. The uterus, right tube, and ovary were normal; the left ovary was wanting. The fœtus was enveloped in a capsule, and was in a remarkably well-preserved state; the face, internal organs, and even the striæ of the muscles being recognizable. The placenta was found, but its position is not stated.

CASE V.

Is reported by Dr. Galli, in La Sperimentale, xxxix.: 2, p. 135.

In this case, two children having been borne, pregnancy occurred, for the third time, at the age of thirty. Fætal movements ceased after the eighth month. No birth followed. Subsequently, for a long period, she suffered from severe abdominal pain. Became pregnant again, and was delivered of a healthy male child. The product of the third pregnancy was carried for thirty-seven years. In her sixty-seventh year she fell, and probably disturbed the lithopædion, as a violent peritonitis intervened, from which she died. The autopsy revealed a well-formed lithopædion; but nothing further is stated.

CASE VI.

Is reported by Dr. Plexa, Monatschr f. Geburtsh, xxix., 4, p. 242.

In this case symptoms were manifest which caused the diagnosis of extra-uterine pregnancy to be made. There were repeated attacks of abdominal pain, accompanied by fever. These gradually subsided, and strong hopes were entertained that this case would eventuate in a Lithopædion. After one and a quarter years, however, a peritonitis ensued, from compression of the intestines between the tumor and the abdominal walls, which caused the patient's death at the age of forty. At the autopsy it was found that the fœtus had entered the abdominal cavity by the bursting of the left Fallopian-tube. The right ovary and tube were normal. The color of the fœtus was dark-brown and calcification had begun.

CASE VII.

Is reported by Prof. J. Van Grau and Dr. Schrant in Genees. en Heilkunde te Amsterdam, ii., 1, pp. 17-96.

The patient was married at twenty years of age. Had seven children, and three miscarriages. Twelve years before her death she noticed a gradually increasing swelling of the abdomen. The tumor was distinctly movable, and appeared to be adherent at the umbilicus. A diagnosis of lithopædion was made; and, at her death, at the age of forty-two, in the Amsterdam Hospital, this was confirmed. The tumor was free, except at the front, where it was attached to the abdominal walls. The fœtus was developed in a calcified membrane; its head was situated at the umbilicus, the back toward the left hypochondrium; arms and legs drawn toward each

other, and to the right. The uterus was in the lower pelvis, and was normal. The left ovary and tube were also normal. In the place of the right ovary there seemed to be a cyst, filled with a brownish substance, attached to the tube. After the covering was stripped off the fœtus was seen with the head, legs, and arms drawn toward each other. The internal organs, muscles, and other structures were easily recognized.

CASE VIII.

Is reported by Dr. Wagner, Arch. des Heilk., vi., No. 2, p. 174.

The patient was a widow, sixty-eight years old. At the age of twenty-four she had given birth to five children. In her thirty-seventh year she again became pregnant, but was never delivered of the child. Labor-pains were not present. For a long period the abdominal enlargement remained constant in size, and Cæsarean section was advised. Finally, the tumor began to grow smaller; her menses returned, and fair health was experienced, the only complaint being of a feeling of weight in the abdomen. At the autopsy the tumor was found to fill the lower pelvis, and to be attached to the bladder, rectum, and uterus. The tumor weighed three-quarters of a pound, and was about the size of a man's head. It was covered by a yellowish membrane. The left tube and ovary seemed to be growing from the tumor, the uterus being pushed to the right. The fætus was of female sex; the head was much drawn to the right, and bent upon the thorax. The skull was markedly compressed, the bones overlapping; calcification was present, but not uniformly. The various organs and muscles were not distinguishable, being changed to a fatty mass, which contained hæmatoidin crystals.

CASE IX.

Is reported by Dr. Bossi, Sitzmeister d. Vereins d. Aertze in Steirmark, xi, page 37.

In this case a lithopædion was diagnosed in 1868. During the years 1869 and 1870 abortion was induced several times. The operation was repeated in 1872, with a fatal result, peritonitis following. The autopsy revealed a pear-shaped tumor about the size of a man's head, covered with a capsule, which was very thick and hard (calcified). Portions of the fœtus were in a natural condition, and portions were changed to adipocere, some of the bones being entirely denuded. The tumor communicated with the rectum by a small opening. The uterus and tubes were normal. Right ovary atrophied, left one adherent to tumor.

CASE X.

"Tübingen Inaugural-Abhandlung," von Wilhelm Kieser.

The lithopædion was found in a woman 90 years of age, in 1720. In 1674 she had all the symptoms of pregnancy, fætal movements being very noticeable. At the expiration of nine months labor-pains started up; the membranes ruptured. Pains continued for two weeks, and then gradually disappeared; the fætus having apparently escaped into the abdominal cavity, after rupture of the uterus. Two children were subsequently born. The autopsy revealed a large tumor, 13.5 c.m. in diameter, covered with a capsule so hard that a knife could not cut it. The stroma contained an exudation in which lime-salts were deposited. The skin of the fætus was well preserved, covered by epidermis more or less calcified. The muscles

could not be recognized, having been changed to a "soft substance" (adipocere). The brain was a blackish-brown mass, which was pulverulent and easily melted; the membranes were of a leathery consistence. A citron color was diffused throughout the entire structure. The reports concerning the position of the tumor are not trustworthy.

CASE XI.

Is reported by Smellie in his "Collection of Cases and Observations in Midwifery," vol. ii, page 65.

The patient was pregnant in 1731, with the usual signs. At the 6th month feetal movements ceased, as the result of a fright. Under treatment she discharged a mass, which was thought to be a part of the placenta, as well as a small amount of fluid. There was no decrease in the size of the abdomen. In July, 1733, two years and two months from her first pregnancy, labor-pains returned, with an apparent rupture of membranes. At this time the child was found in the abdomen. In January, 1734, she became pregnant, and was delivered, Oct. 28. She was again delivered, Oct. 22, 1735, also Oct. 9, 1738, and June 17, 1741. She was admitted to Guy's Hospital Oct. 14, 1747. She died Nov. 7, 1747. The autopsy showed the abdominal contents to be nearly in their natural state. In the right pelvis was a child, attached to the ilium and neighboring membranes by the peritonæum, in which the tube and fimbriae were apparently lost. The fætal integument had become partially calcified.

CASE XII.

In giving the history of this case I hoped to quote from the recordbooks of the physician in attendance at the time of the accident, who, as I understand, took extensive notes; but I am unable to do so, owing to his death a few years ago, and the subsequent destruction of his records. I am fortunate, though, inasmuch as such information as I have of the case comes from a twin sister, who is still a remarkably vigorous woman, both mentally and physically, and whose statements, as far as they go, are undoubtedly correct. Mrs. A---- was married September 24, 1844. She never had any miscarriages. She was delivered of a perfectly healthy child, January 29, 1848. Early in January, 1856, she became, as events proved, pregnant again; though her condition at the time was merely surmised, as menstruation continued to be present, and, in fact, existed, with more or less regularity, throughout her entire pregnancy. It was not until the middle of May that the attending physician made a positive diagnosis of pregnancy, basing his opinion on fætal movements, which became manifest at that time. Early in March, while visiting friends, she fainted, vomited, and complained of epigastric pain. There was no flowing at this time. The following day she rode home, a distance of four miles. Directly after this she had three "inflammatory fevers," characterized by abdominal pain, excessive tympanitis, and uncontrollable

nausea and vomiting. During one of these attacks an abscess formed just above the pubes, which opened, but did not discharge much, if any. Counting from the middle of May, when fætal movements began, October I would be the probable date of confinement. About that time the physician was summoned, not on account of labor-pains, as she never had them, but on account of excessive and painful movements of the child. These were always very marked, and caused her the utmost inconvenience. As she expressed it, she felt more life with this child in two hours than during her entire previous pregnancy. October 13 the physician was again summoned for the same reason as before. At this time "something was rubbed on the abdomen," after which the movements grew less and less, and finally ceased. For the following ten years she was an invalid, though nothing very explicit could be obtained as to her condition. was generally miserable, and had a number of attacks of abdominal pain at irregular intervals, sometimes accompanied by icterus. During this period the tumor very gradually decreased in size, finally remaining stationary, and causing no trouble other than a feeling of weight when standing or walking too long. Her health was fair until 1883, when a malignant growth attacked her larynx, which eventuated in her death, December 24, 1886. The autopsy was performed December 26, 1886, Drs. Bill and Metcalf assisting. The body was very much emaciated. The tumor was apparently situated in the median line, with its most prominent point at the umbilicus, but on palpation it was found to extend downwards and to the left. On making the incision it was found to be adherent to the abdominal walls, and it seemed as though it would have soon made its way through, either from pressure or ulceration, so thinned had the structures become at the point of its adherence. The position of the tumor may be best described by borrowing the obstetric expression, sacrum, left anterior, though it was entirely out of the pelvic cavity, the base of the skull being on a level with the umbilicus. It was almost lying loose in the abdominal cavity, the only points of attachment being the one just referred to, to the abdominal wall; what was probably the umbilical cord, and some small adhesions to the intestines. ranged round the tumors, none in front of it, and were one mass of adhesions, forming, with the abdominal wall, a cavity, as it were, containing the tumor. The umbilical cord (?) passed directly downwards, enclosing the uterus, and then gradually fading out into the peritonæum. Nothing that would answer for a placenta, or the remains of one even, could be found. Roughly speaking, the parts of the fœtus were normally disposed, the thighs and arms being flexed on the abdomen and chest respectively. The left leg was rotated slightly outwards, as well as extended, and the forearms, instead of being crossed, were more or less parallel with the long axis of the body, the hands being placed well up beside the head, as is shown in Figs. 16 & 17. The tumor weighed 23/4 lbs., was 81/2 in. long, and 121/4 in. in circumference. The cross-section showed it to consist of a fætus and its envelopes, the process of calcification being especially marked in the membranes. The uterus, Fallopian-tubes, and ovaries were also removed, but furnished no points of importance. The autopsy suggested an extra-uterine pregnancy of the abdominal variety; but the history points rather to one of the tubal variety, primarily. To epitomize the various dates:—

Mrs. A was married in .						1844
						4 years later.
		•				8 " "
f cyst	and	perito	nitis			at the third month.
					. 3	" " ninth "
						to years.
			*			27 "
of lar	ynx i	nvadi	ing th	e lung	ξ,	at the age of 67.
	f cyst	f cyst and	cyst and perito	f cyst and peritonitis	f cyst and peritonitis .	f cyst and peritonitis