

### III. *A Case of Hydatids in the Uterus.* By ROBERT PERRY, M.D.

(*Read at the Meeting of the Glasgow Medical Society, April 6, 1858.*)

ON the 27th of February, 1856, I was called upon to visit Mrs. Q., who was said to be in labour, and for attendance on whom I had been previously engaged. The patient was a well-formed female, aged 42 years, of phlegmatic temperament, stout, above the average stature, and of fair complexion. She was the mother of seven children, the last of whom, although carried to the full period of utero-gestation, was born putrid. The catamenia had shortly afterwards been established, and had gone on regularly until about nine months ago, their disappearance at that time having been attributed by her to conception. Since their interruption, her health had not been so good, and she had suffered from loss of appetite, constipation, occasional sickness, and œdema of the lower extremities. On two or three occasions during the last month, a sudden and copious discharge of blood had occurred, not accompanied by any abdominal pain, nor induced by any unusual exertion. As these discharges had not lasted for any length of time, no particular attention had been paid to them.

According to the patient's own calculation, she was then within a few days of the natural period of labour. For the last two or three hours she had been complaining of grinding abdominal pains, accompanied by a sanguineous discharge. She imagined that she had felt the motions of a child that same morning. On examination of the abdomen externally, it presented the usual appearance of a ninth-month pregnancy, with the exception of rather a greater amount of distension, so as to have induced patient to believe that she would be delivered of twins. The uterus could be felt well defined, not contracting, but very tense, as if from an unusual quantity of liquor amnii. Its fundus reached almost to the level of the ensiform cartilage. On examination per vaginam, the os uteri was found so high in the pelvis, as to be with great difficulty reached by the finger, and was dilated to about the size of a sixpence, with thin and soft edges. There was no protrusion of membranes, but the aperture was covered by a substance which I mistook for the placenta, from the firm lobular sensation which it communicated to the finger. No presentation of any foetal part could be made out at that time. My attention was not then directed to the state of the mammæ, which, as I afterwards ascertained, had all along remained flaccid; but the knowledge to be derived from an inspection of the breasts, more especially when the female has been several times pregnant, is so equivocal as to have little or no value. Had I made a more careful examination of the case, I might probably have arrived at a more correct diagnosis; but, as it happened, influenced partly by the firm lobular sensation communicated by the presenting mass,

and doubtless, in a great measure, by my previous knowledge of the history of the case, I concluded that I had to deal with a case of placental presentation; and as there were no alarming symptoms at that time, I ordered the patient to keep her bed, and left general directions for the suppression of any excessive hæmorrhage before my return, with instructions to send for me should any change occur. On my returning in about an hour and a half afterwards, just as I reached the house, a very alarming hæmorrhage began to take place; and as the patient had already sustained a considerable loss, and was now very much exhausted, acting on the supposition of my previous diagnosis being correct, I determined at once to have recourse to the operation of turning, if necessary, and to deliver the patient immediately, should the dilatation of the os uteri be found sufficiently advanced to admit of the operation.

The os uteri was still so high as to be almost beyond the reach of the finger, but finding it dilated to nearly the size of a crown piece, I gradually insinuated my hand, without any difficulty, within the uterine cavity, and close by the parietes of the womb. To my surprise I was unable to discover any fœtus, but found the whole uterus occupied by a consistent mass, part of which I gently detached by the fingers, and on its removal I saw at once that it was entirely composed of hydatid cysts. I immediately administered a dose of ergot of rye, in a short time after which regular labour pains set in, and portions of the mass were discharged by each pain. After the exhibition of another dose of the ergot, and some assistance given by gently scooping away portions of the mass by means of the hand, in the course of an hour the whole contents were expelled, unaccompanied by any discharge of blood. The uterus then contracted firmly, and remained so without the occurrence of any further hæmorrhage.

Next day I found that the patient had passed a tolerably good night, and now only complained of weakness and headache. The pulse was feeble and rapid, the tongue was clean, and there was not much thirst. The lochial discharge was just as after an ordinary delivery, and no more hydatids had come away. She continued to improve daily till the tenth day after delivery, under the employment of a nutritious diet, and small doses of quinine and sulphuric acid. The lochia had been almost entirely ceased, and the breasts had never become at all turgid. At this time she was seized with a severe rigor, which lasted about forty minutes, and was succeeded by great heat and perspiration. She also complained of pain in the left hypochondriac and lumbar regions, and upon examination the spleen was detected to be considerably enlarged and very tender upon pressure. Next day, after the administration of some purgative medicine, she voided two large lumbricoid worms, and at the same hour as she had previously been seized, had again a severe rigor, followed as before by hot and

sweating stages. She was then put upon larger doses of quinine. The ague paroxysms continued to recur daily for about ten days, but gradually became less severe. The spleen slowly returned to its normal size, and the patient, under the use of tonics and chalybeates, regained her usual health and strength.

The predisposing cause of this attack of intermittent fever was evidently the debility induced by the previous loss of blood, but I cannot as easily account for the exciting cause, as I never met with or heard of a case of ague occurring in the district in which I then practised, with the exception of those which had been imported from a distance. I am afraid the ingenious theory lately advanced by Mr. W. C. Nash (*Glasgow Medical Journal*, vol. xix., October, 1857), with respect to malaria, could not be satisfactorily illustrated by this case. There can be no question as to there being in this instance diminished innervation; but at the same time it is equally evident that it was induced by the anæmic state of the patient, and not by a negative electric state of the atmosphere.

The hydatids alone filled two large wash-hand basins, and weighed nearly nine pounds. They varied in size from a pin's head to that of a large grape; were not apparently developed around any central mass, but were only united to each other by very slender and thread-like peduncles. They contained the limpid and colourless fluid commonly found in such vesicles, and I was unable to detect any of the hook-like processes of the echinococcus which are frequently seen floating in the liquid of similar cysts, or attached to their inner walls. No appearance of deciduous membranes could be traced, and consequently, as might be expected from their absence, there was no serous fluid discharged in addition to that contained in the cysts themselves.

Uterine moles are sometimes divided into two classes, thus—  
1. Those which are the product of conception. 2. Those which are independent of conception. The more common division, however, is the following:—1. Blighted conceptions. 2. Fleishy or fibrous moles. 3. Vesicular moles. The last of these are further divided by Boivin and Dugès into—1. The vesicular mole, containing the embryo. 2. The hollow vesicular mole, the foetus being anencephalous or altogether shapeless. 3. The clustered vesicular mole, where the hydatids are attached to a central part of solid matter, as grapes to a stalk; and to this last subdivision the present example is most closely allied.

It has been stated by several pathologists, and more particularly insisted upon by Madame Boivin, who has given two cases in proof of the assertion, that vesicular moles are always enveloped in a membranous sac, consisting of two distinct layers, but which being generally burst previous to the discharge of the mass, frequently escapes observation. In the present instance, however, after a minute examination, I failed to observe the slightest trace

of any sac. From the absence of any central nidus and of the decidua, it might be inferred that this was not one of those cases which are found to result from the blight of an ovum and its degeneration into a mass of hydatids. The ovum may perhaps be imagined to have been blighted at a very early period of uterogestation, and subsequently to have been dissolved entirely in the liquor amnii, as sometimes happens; usually, however, there is some trace of it left. The disappearance of the membranes, however, cannot be so easily accounted for in the same way. Nor could this accumulation be regarded as resulting from the transformation of some part of the placenta, retained from the preceding pregnancy, when we take into consideration the history of the disease and the length of time that had since elapsed, viz., upwards of two years. Ramsbotham advances the theory that such hydatids are the enlarged and dropsical villi of the chorion, and there is very little doubt but in the great majority of cases they have this origin; but he also thinks that they may be true hydatid acephalocysts. I would be inclined to look upon them, in this case, in one of the two following lights,—either as the production of a diseased action of the mucous membrane of the uterus, and possibly independent of any sexual intercourse, or as true hydatid acephalocysts; but I regret that I did not apply any satisfactory tests to determine their vitality, and it so happened that they were inadvertently thrown away before I had an opportunity of securing a portion to be submitted to a microscopic examination, which, in all probability, might have settled the question.

There is a great variety of opinion amongst authors as to whether or not this disease is necessarily connected with conception, and although it appears a question that might very readily be determined by observation, still we find authors advancing very opposite opinions. Dr. Ashwell believes in the possibility of their occurrence in virgins, and says, "It would be highly improper to conclude that the vesicular hydatids necessarily compromise female character;" while, on the other hand, Dr. Montgomery says, "My own belief then is, that uterine hydatids do not occur except after sexual intercourse, and as a consequence of impregnation, never having met or heard of a case in which their presence was not accompanied or preceded by the usual symptoms of pregnancy." I do not intend to enter further into the discussion of their pathology, but merely to state that there are upon record authentic accounts of cases in which they have been expelled from the uterus of virgins, about whose chastity no suspicion could be reasonably entertained, and I can see no satisfactory objection for supposing the womb liable to their deposition, as well as the liver or kidneys, or any other organ of the body in which they undoubtedly occur.

Dr. Montgomery objects to this argument from analogy, on the plea, "that the hydatids produced in the situations alluded to

differ *toto cœlo* in their characters from those of the uterus; and, secondly, that whenever hydatids are formed, it is always in connection with serous membranes, which do not exist in the uterus until the ovum is deposited there." If this assertion be correct, how then could the present case be accounted for, except on the supposition that the serous membrane had become entirely absorbed subsequently to the formation of the hydatids? Were it proved that hydatids occurring in the brain, liver, &c., had always an independent existence, or, in other words, were always true acephalocysts, whilst those found in the womb never existed independently of it, or were merely dilatations of the floculi of the chorion, I could then understand the force of this objection.

Is it not possible that hydatids in the uterus, although a very rare disease, are modified by their novel situation, because, according to Dr. Fleming (*Dublin Journal of Medical Science*, vol. xxiii., p. 104), "The cystic entozoa, or hydatids, do not form a separate class of parasites, but are merely the cestoid entozoa or intestinal worms in a degenerate state; and the same embryo tape-worm produces different forms of hydatid, according to the species of animal and part of the body in which it may chance—or, rather I should say, mischance—to be developed, for the hydatid is essentially abnormal both in form and site, and these entozoa obtain their perfect growth only in the intestinal canal—their proper dwelling-place."

We possess no certain diagnostics in the earlier stages of this disease, as the symptoms closely resemble those of pregnancy. Although there may be occasional discharges of blood or of a serous fluid, and a degree of ill health, such as is not usually met with in natural gestation, still it is not until after the period of quickening, that, in consequence of the absence of the foetal pulsation and of the ballottement, &c., we can definitely affirm that it is not a case of natural pregnancy, although as yet we may not be capable of determining its true nature. The enlargement of the womb is generally rapid, and the cervix is commonly shortened. The os uteri may at times be found patent, but it is more frequently felt to be firmly closed, as in ordinary gestation, until a very short time before the expulsion of the mass. Should, however, one or two of the vesicles be expelled, we at once obtain a key to an accurate diagnosis; but this does not usually happen till shortly before the whole are discharged.

Considered in relation to medico-legal practice, the foregoing case may justly be looked upon as interesting to the medical jurist. About the time of my attendance upon this patient, two or three dead bodies of newly-born infants had been exposed in different localities not far from the neighbourhood of her house. Let us suppose, for example, that this had been an unmarried female, or that her husband had been casually separated from her for a time, and that she had been delivered without the assistance of a medical man. In such circumstances, supposing the mass to

have been disposed of in any way, so as not to be able to be produced in proof of her innocence, it would not be very difficult to conceive that suspicion might point to this woman as having been recently delivered of a child, and upon examination by any medical man, all the symptoms of recent delivery would have been found upon her, with the exception of the fulness of the breasts, the absence of which would have had little weight against the well-marked signs exhibited by the organs of generation.

In conclusion, allow me briefly to call attention to the main points of interest in connection with this case, viz.,

1. The length of time which the disease lasted, being apparently of the same duration as an ordinary pregnancy, and thus differing from the majority of similar cases, in which, as a general rule, the hydatids are expelled at an earlier period.

2. The great similarity of its symptoms to true pregnancy—the similarity being so marked as completely to deceive this female, who had already experienced pregnancy seven times. Suspicions are generally excited by the absence of motion, and by the size of the belly and state of the womb not corresponding to the supposed period of pregnancy; but here the woman herself imagined that she felt the movements of the child, and the increase of the womb exactly corresponded to the supposed period of pregnancy.

3. The caution necessary to be observed by the practitioner in his diagnosis betwixt such a case and one of placental presentation. Although it is not mentioned by authors as a mistake likely to happen, still I think it of importance that young practitioners should, at all events, be upon their guard against such an occurrence.

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IV. *Account of some Trials made to Facilitate the Removal of Stones from the Urinary Bladder—Extrusion with the Fingers—Landing-Net.* By Professor A. BUCHANAN, M.D., one of the Surgeons to the Glasgow Royal Infirmary. ✓

AMONG the advantages which attend the rectangular operation of lithotomy, one is to render more easy the extraction of the stone in the ordinary way, with the aid of the forceps. This depends upon the nature of the operation, which, by diminishing, as far as can be done, the distance between the opening made in the bladder and the external aperture of the operation wound, brings the stone more within reach, and thus facilitates the ordinary manipulations for extraction. Of the extent of the facilities so obtained, those only can judge who are familiar with this operation, and have had opportunities of comparing it with the old lateral operation, which