

HYDATIDIFORM DEGENERATION OF THE OVUM.

BY

GRAILY HEWITT, M.D., M.R.C.P.,

PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY
AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S
HOSPITAL MEDICAL SCHOOL.

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THE specimen exhibited was presented to the author by Dr. R. Uvedale West, of Alford, in whose practice the case occurred.

The history of the patient, the particulars of which were kindly supplied by Dr. West, was as follows:—She was the wife of a shoemaker; her age 33; married ten years ago; catamenia never regular before marriage, the interval varying from six to eight weeks, but after marriage the discharge occurred only at regular intervals. She has had four children, born respectively, February 1851, October 1853, April 1856, June 1859. The first child was suckled one month; it then died. The second child was suckled a year. The third, a year and nine months. The fourth child, born in June, 1859, lived only nine weeks; it was suckled during that period.

On March 2d, 1860, the specimen exhibited was expelled from the uterus. During the interval between the death of the last child (July 1859) and March 2d, 1860, her symptoms were the following:—Six weeks after the child's death a discharge, considered by the patient to be of menstrual character, occurred; a month afterwards, again; five weeks later, again; six weeks later, a fourth time; then again after a rather longer interval. Each time, however, the discharge only amounted to a "show." There was, during these

months a "sinking weakness of stomach," which the patient would have considered, from her former experience, as indicative of pregnancy, had it not been for the fact that a discharge, *apparently* menstrual, was the means of inducing her to set aside this view of the case. She considered she was menstruating, though irregularly.

Three weeks previous to March 3d, 1860, hæmorrhage of uterine character set in, and continued with intermissions, during that period. At the end of that time a degenerated ovum was expelled from the uterus. The patient subsequently did well.

On examining the specimen forwarded to me, I found that it was about the size of a goose's egg, and that it consisted of an ovum in an advanced stage of hydatidiform degeneration. The mass had apparently come away altogether, but during the process of expulsion it had been much torn, and, in addition to this, inverted. With care and the exercise of a little patience it was possible to restore the specimen and to place the parts in the normal relation one to the other. In the restored condition it was now exhibited (see drawing accompanying).

There was no trace of an embryo to be discovered. The mass consisted almost entirely of the decidua uteri and of chorion villi in an advanced stage of hydatidiform degeneration. The decidua uteri was everywhere greatly thickened, measuring from one third to half an inch thickness; it formed a fleshy-looking bag, open below at the situation of the cervix, and interrupted above, so to speak, by the altered chorion villi, the latter projecting in masses like strings of oval beads or small currants from the part of the ovum answering to the placental site, formerly the decidua serotina. Masses of altered chorion villi also projected into the cavity formed by the decidua.

The hydatidiform bodies consist of oval or round bladders of various sizes, the largest half an inch long, and connected one with another by intervening pedicles, the pedicles themselves arising from a thin membrane. A few of the bladder-like bodies are detached from the rest, ap-

pearing to grow outside of and through the decidua at a little distance from the remainder, as seen in the drawing. The amniotic cavity appeared to be obliterated by the pressure of the growing masses.

In this specimen is exhibited a much more advanced stage of the condition of the ovum described by me in Vol. I of the 'Obstetrical Transactions,' the difference being that, in the specimen formerly described, the ovum had only been retained in the uterus a short time after the hydatidiform degeneration had commenced. In the present instance, as would be easily intelligible on comparing the two specimens together (see Plate IV, 'Obstetrical Transactions,' Vol. I), the position of the parts had become changed, owing to the increased bulk consequent on the *growth* of the chorion villi and their conversion into bladder-like masses, some of them as large as currants. The vesicular bodies formed in the aggregate a considerable bulk, and their enlargement was attended with two effects—first, the portion of the ovum the seat of the change tended towards the centre of the uterus; and, secondly, the uterus itself increased in size. The chorion villi which became changed into these bladder-like bodies were situated, it must be recollected, originally *externally* to the decidua, forming together with the decidua serotina the part of the ovum which would become placenta (see Plate IV, 'Obstetrical Transactions, Vol. I). Why it was that the relation of the parts became altered as the hydatidiform change advanced would now be evident. While the growth remained in the uterus the mass of altered villi was doubtless surrounded almost entirely by the decidua, the cavity which is shown almost empty in the accompanying drawing being filled by these bodies.

In the further progress of the case, supposing that the ovum had not been expelled so soon, the vesicular masses would have tended still more towards the cervix uteri, and their successive rupture would have occasioned discharge of their fluid contents; in other words, the watery, alternating with bloody discharges usually present in the advanced stage of the affection, would have been noticed.

The bladders themselves consisted of two layers enclosing a fluid, the outer was in some instances ruptured, leaving the more transparent inner covering exposed.

The extreme thickness of the decidua uteri is noticeable. The structure of this portion of the specimen appeared nearly identical with that of the decidua uteri of normal pregnancy, and the orifices of the tubular glands were evident on the internal surface. It appeared as if the whole had maintained an intimate vascular connexion with the uterine tissue.

With reference to the nature of this curious, but not very infrequent, morbid condition of the ovum, little remains to be added to what I have stated in a former paper read before the Society. The embryo, as I have there pointed out, appears to perish first, and at a period when the chorion villi have formed for themselves a tolerably extensive connexion with the surface of the uterus. These villi continue to grow, but not to develop; their growth resulting in the production of the bead-like clusters so well depicted in the drawing, and which are really membranous bags filled with serous fluid. Traces of the embryo are sometimes present, but not when the mass has remained for some time in the uterus. There is no evidence that the chorion villi become altered previous to the death of the embryo. Analogy and the results of careful microscopic and anatomical examination seem to show that the first in the chain of events is the perishing of embryonic life. Why in one case the ovum should be retained for a short, in another for a long, period, seems to be a matter dependent on accident. The expulsion of the uterine contents will take place early if any circumstance capable of rousing the uterus into activity occur. Otherwise a passive, slow increase in the growth of the mole, and consequent enlargement of the uterus, may go on for several months. With regard to the symptoms, they are exceedingly irregular, as this case demonstrates. The patient thought she was not pregnant. Alternate watery and bloody discharges have been considered pathognomonic of this condition, but it does not appear that this is true,

for, on the one hand, those very symptoms have been known to be present in cases of polypus uteri ; and, on the other, as has been shown, it is only when the bulk of the bladders drives them towards the cervix uteri that the watery discharge consequent on their rupture can be expected to occur.

DESCRIPTION OF ACCOMPANYING PLATE.

The drawing represents the entire mass in its restored condition, and of the natural size. The cavity formed by the decidua, here shown as empty, was originally occupied by the hydatidiform bodies.

