ACCOUNT
OF A
FRESH DISSECTION OF A PREPARATION
OF
TUBAL GESTATION,
DESCRIBED BY DR. JOHN CLARKE IN THE 'TRANSACTIONS OF A
SOCIETY FOR THE IMPROVEMENT OF MEDICAL AND
CHIRURGICAL KNOWLEDGE FOR 1793.'
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THE following communication is intended merely as a contribution to the anatomy of cases of tubal gestation. I shall therefore refrain, as far as possible, from any theoretical opinion as to the function of the parts described, and confine myself to a simple explanation of the preparation and the drawing by which it is accompanied.

When the communication by Dr. R. Lee on this subject, which is published in the 'Medico-Chirurgical Transactions,' Vol. XLI, p. 137, was read before the Society, reference was made in the discussion which followed to the preparation on which the present paper is founded, as completely refuting the view which Dr. Lee advocated. The preparation had not at that time been completely dissected; and the further dissection which I have made of it demonstrates a state of

things certainly different from the original description. As the preparation is in some respects a classical one, and is frequently appealed to by writers on this subject, it appears simply just to give publicity to the following account.

This preparation was made by the late Dr. John Clarke, and described by him in the 'Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge,' vol. i, p. 215, 1793. That paper is, no doubt, familiar to most persons who have paid attention to the subject. It is illustrated by two plates, one representing the whole preparation, the other the Fallopian tube and the embryo contained in it. I need not detain the reader with any lengthy reference to that paper. It recounts the circumstances of the case—the patient dying at an early period (probably before the end of the second month) of pregnancy from hæmorrhage into the peritoneum, the effusion amounting, it is said, to a gallon; and the post-mortem examination, in which a rent was found in the Fallopian tube, filled with the shaggy vessels of the chorion, from which the bleeding had proceeded. The cervix uteri was found plugged with gelatinous matter, the body and fundus occupied by what is described as "membrana decidua" (without being further particularised); and then Dr. Clarke goes on to say, "One thing particularly deserving of notice in the present case is the formation of the membrana decidua in the uterus before the ovarian ovum had reached it. By ovarian ovum, I mean the ovum as it comes from the ovary, or at least as it exists in the Fallopian tube, consisting of two membranes, the chorion and the amnios, which contains the liquor amnii and the embryo, but without the decidua, which membrane is formed in the uterus." The accompanying plates do not show the membranes around the ovum with sufficient distinctness to support any conclusion; but it is clear from Dr. Clarke's description, and from the state of the preparation when it came into my hands, that he believed the chorion to be covered externally by the walls of the tube.

The preparation was given by Mr. Stone, together with

the rest of his splendid obstetrical collection, to the museum of St. George's Hospital. In the course of its removal thither, the embryo happened to become detached from the funis; but the latter still remains, and is clearly visible in the cavity of the amnion. On looking at the ovum, I noticed a separation between it and the wall of the tube in one part; and, by dissecting with a blunt instrument under water, this separation was easily extended around the whole circumference of the ovum (in the situation pointed out in the drawing by small pieces of bristle), except at the part where the rupture had occurred, and where the tissues were so firmly adherent that I did not attempt to separate them. This being done, the chorion was seen to be surrounded in the whole of its extent by a stout membrane, of a fibrous appearance, plainly distinguished from the chorion internally by the villous structure of the latter, as contrasted with its own fibrous texture; and distinguished from the wall of the Fallopian tube externally, inasmuch as it formed a complete circle around the ovum, and did not pass down either orifice of the tube. This is shown at *d' d''* in the drawing. On examining this membrane further, it was easy to separate it into two layers over a great part of its extent. The separation, both of the membrane from the wall of the tube, and of its two layers from each other, was effected with the greatest facility.

In microscopical structure the membrane consisted partly of ordinary fibrous tissue, partly of very firm and strong fibres, running in a straight direction, but somewhat wavy in outline, and much smaller in diameter than the fibres of unstriated muscle.

The structure which lined the body of the uterus was thick and lobular on its surface. On looking at it with a lens, small punctiform depressions could be seen in it. It was very easily raised from the surface of the uterus; as has been done on the left side of the preparation, where pieces of bristle have been placed between them, and exhibited the surface of the lining membrane roughened, but apparently unbroken. On examination of this substance with the

microscope, it was seen to consist of an aggregation of cells, somewhat resembling epithelial scales, but for the most part not larger than pus-globules, and of different shapes, some being elongated, while others were round. Each had one small nucleus. They were rather granular, perhaps from partial decomposition during their long preservation in spirit. Here and there an appearance of fibrillation might be seen, but no distinct fibres.

DESCRIPTION OF PLATE.

The drawing represents the present appearance of the uterus and Fallopian tube in Dr. John Clarke's case of tubal gestation.

- a.* Amnion containing the funis.
- b.* Chorion.
- c.* Membrane external to the chorion, consisting of two layers.
- d.* Wall of Fallopian tube, showing *d' d''*, its upper and lower orifices.
- e.* Substance lining the body of the uterus.
- f.* Cervix uteri, occupied by gelatinous matter.