CASE OF

EVENTRATION AND OTHER DEVIATIONS FROM THE NATURAL STATE OF THE FŒTUS.

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SARAH TOVEY, of delicate constitution, was exceedingly frightened in the second month of pregnancy, by a report of the death of her husband, and again, in the fourth, by a lunatic. She had discharge of blood at the time of the first fright, and at one period subsequently; and there has existed a slightly coloured discharge for six weeks before the present time. She has also, at times, passed small substances, which she described as like small pieces of blood. She felt the child move a few hours before its birth. She has had four children, all well-formed.

March 1. I was called by a midwife to see the above patient, who had been about four hours in labour, and had suffered considerable discharge of blood. The midwife said that the membranes had given way, but that she could not make out the presentation. I examined, and found a substance, of apparently a spongy texture, presenting at the os uteri (which was high up); behind this substance was a hand. The case being considered as an arm presentation, with the placenta attached to the os uteri, it was determined to turn and deliver. A large dose of tincture of opium having been given, the hand was introduced into the uterus. The uterus acted strongly, and I was obliged to proceed very slowly, placing my hand in a flat position during the pains. The uterine action continuing very powerful, the tincture of opium was repeated. I was surprised to find the child's head at the fundus uteri; with some difficulty a foot was obtained and brought out of the vagina. The foot was secured with a ligature, and extraction was continued; the pains were considerably active, and in a very few minutes the child was expelled, the substance I have before mentioned coming first, and the hand following immediately. There was no discharge during the pains, the child was still-born, and the mother speedily recovered.

Dissection by Mr. F. H. Colt.—The fœtus weighed four pounds and three quarters. An irregularly-shaped tumour, about the size of the child's head, projected from the right side of the anterior part of the abdomen. The integument and muscles of the abdominal walls terminated by a well-defined line all round the base of the tumour, which was invested with a semi-transparent membranous covering, in some parts slightly fleshy. This membrane was easily divisible into two layers, upper of which was continuous with the covering of the cord; the internal layer was most probably the peritoneum, as it adhered to, and was reflected on, the liver, forming ligaments supporting that viscus. The lower part of the membranous covering was loose, and towards the left side of the base of the tumour was prolonged into a sac, about one inch and a half long, and one inch broad, corrugated externally. This sac, and the loose part of the membrane, contained a brown fluid, much like urine, in quantity about an ounce and a half or two ounces. The sac, though apparently single externally, on being laid open, was found divided into two compartments by a perpendicular septum. Its walls could be divided into three layers, the outer of which was a strong white membrane, the middle a fleshy and muscular layer, the innermost a thin membrane, presenting a smooth surface. The sac was dilatable, and, on dilating it, the external corrugations disappeared. At the left side of the pouch described above was an opening partly concealed among its corrugations. This opening led into a canal about half an inch long, presenting a smooth surface, and this canal was continued into a cavity with fleshy walls. The cavity was not situated free in the abdomen, but was partly inclosed in the thickness of the walls of the sac. The canal and cavity were thought to bear a resemblance to a vagina and uterus. No ovaries were perceived.

The upper part of the tumour contained the liver, which formed the greater part of its magnitude. The lower part contained the intestines and the fluid above-mentioned, which was in contact with them. The intestinal tube terminated on the anterior part of the abdomen by an opening directed obliquely through the wall of the left compartment of the corrugated sac before described. The stomach and intestines were full of meconium. There was no straight intestine or anus in the natural situation,

and no perineal opening.

The arteries presented a remarkable deviation. The aorta first gave off a trunk on each side which, on the left side, divided into a renal and common iliac artery. This common iliac artery first sent two arteries to the pelvis and was then continued as the femoral. The corresponding trunk on the right side divided into a renal and an artery to the pelvis (internal iliac). Another artery was then given off to the pelvis on the right side, then the right femoral separately, and lastly, the trunk of the aorta still continuing single, was continued into the cord, so that the latter consisted of only one artery and the vein. The artery did not emerge from the navel, but made its exit at a lower part of the abdomen, and joined the vein at an angle.

Remarks.—There is a slight analogy between the sac and the cloaca of birds. The vagina and termination of the bowel were both situated close to this pouch, though they did not open into it. The amnios at the fifth week is reflected down the cord (Velpeau), and continuous with the integument. The membranous covering of the tumour may, therefore, have been formed by the adherence of the reflected amnios to the peritoneum, and want of development of the muscles. The deviation of the arteries, as described above, must be considered as rare. Velpeau only mentions three instances, and of these one alone fell under his own observation.

As regards the total absence of anus or genital fissure, if we hold with Tiedemann, Meckel, and others, that the organic evolution is from the sides towards the median line, we shall perceive that, in cases where the usual openings would be useless, from the absence of the internal parts, the development goes on without, as it were,

arresting its progress for the formation of these openings. In the case described above, the absence of vagina or rectum within the pelvis, co-existed with the absence of external openings.

The presentation, that of the abdomen and hand, is extremely rare. Mme. La Chapelle never met with it, and Dugès, in giving the result of 37,126 cases, does not

mention one.

What was the cause of the arrest of development in the abdominal parietes in the above case. The possibility of the shock received by the mother in the early stage of pregnancy, being in some manner connected with the arrest of development, may be suggested. Geoffroy St. Hilaire appears to attribute this arrest, in some cases, to the arteries not supplying a proper degree of nourishment to the part the development of which is arrested. Is it possible that the variation in the distribution of the arteries in the present case had anything to do with the want of the muscle, &c., of the abdominal walls. The presence or absence of the epigastric arteries was not noticed in the dissection.

The great extent to which modern physiologists hold that the development of the fœtus is independent of the mother, and the absence of the nerves of the cord and placenta, which Sir E. Home and others imagined that they had discovered, seem very strongly to oppose the idea that any shock received by the mother would affect or derange the fœtal constitution. Velpeau denies that there are any nerves of the cord or placenta, and does not believe in any direct vascular communication between the uterus and placenta, and most modern embryologists agree with this opinion. Indeed this want of connection seems a wise provision to prevent derangement in the development of the fœtus. If there were an intimate union existing between the mother and child, how constantly might we expect to find imperfections, instead of the wonderful and almost unerring accuracy which we daily perceive. The practical points deserving attention in the above case are the error committed in the diagnosis, and the peculiarity of the presentation. I was misled, on my first examination, by the very great similarity to the touch of the abdominal tumour to the placenta. The bloody discharge which the patient had had during the six weeks preceding her confinement, further confirmed the idea that the presentation was placental. I must, however, confess that I was somewhat puzzled when I found there was not any discharge with the strong pains which occurred during the time I was present; because I need not mention the fact, that in placental presentations the pains increase the hæmorrhage, by separating the attachment of the placenta, in the ratio in which they dilate the os uteri, the contrary being the case in every other kind of uterine hæmorrhage. On examination, too, the tumour was felt detached, but having made up my mind that it was the placenta, I did not hesitate still to think it so. The real state of the case did not strike me at all, but should the same thing happen again, I should be able at once to form a true diagnosis; the two points which I have mentioned, viz., the want of hæmorrhage during the pains, and the detached state of the tumour, are the characteristic marks. Although in this case the diagnosis was wrong, the practice was correct; both in presentations of the abdomen, and of the back, the practice to be adopted, in most cases, would be to bring down the feet and deliver.