

XLVII. *Description of a double Uterus and Vagina.* By John Purcell, M. D. Professor of Anatomy in the College of Dublin. Communicated by Dr. Morton.

Dublin, April 7, 1774.

Redde, June 23, 1774. **L**AST summer the body of a woman, who had died in labour in the ninth month of her pregnancy, was dissected at the Anatomical Theatre of Trinity College. Upon opening the *abdomen*, an *uterus* appeared of such a size and form as are generally observed at that period. It contained a full grown *foetus*; but was furnished with only one *ovarium* and one *fallopian* tube, which were situated on the right side. On the left was placed a second *uterus* unimpregnated and of the usual size, to which the other *ovarium* and tube were annexed. But these two *uteri* were totally distinct and separated from each other, except at the lower extremity of their necks, where their union extended a quarter of an inch, and an acute angle was formed between them. There was nothing extraordinary in the formation of the external parts of generation; but from each side of the *meatus urinarius* a membrane ran downwards;
and

and the two, having comprehended this orifice between them, were joined together a little below it, so as to form, by their union, a *septum* or *mediastinum*, which taking the remainder of its origin from all that prominent ridge called the superior *columna*, and descending perpendicularly, was inserted into the inferior *columna*, so as to extend from the entrance of the *vagina* as far backward as its posterior extremity, and thus to divide it into two tubes of nearly equal dimensions. But each of these did not lead solely to the womb of its own side; for the right *vagina* became gradually wider as it ran backward, and at last was so far dilated as to comprehend, within its circumference, the orifices of both *uteri*; while that on the left side, having taken an oblique direction, ended in a *cul de sac*, or *cæcum*. Such a conformation might have rendered it totally useless: to prevent which, Nature, fertile in expedients, seems to have had recourse to a very extraordinary contrivance. This was a *fissure* in the *septum*, an inch in length, and about an inch distant from the womb of that side. Although its circumference was perfectly smooth, we must acknowledge that it might have arisen from an accidental rupture of the *septum*; the lips of the wound not uniting, and, in process of time, becoming callous; and yet, I imagine, that the parts were originally formed in this manner, in order to preserve a communication between the two *vaginae*.

Thus it appears, that both *uteri* might be impregnated through either *vagina*, as that on the right side led directly to both; and as, by means of the *fissure* in the *septum*, the *semen* could easily be

thrown from the left *vagina* into the right, where the apertures of the two wombs were placed. Through the latter passage both *uteri* would seem to have an equal chance for impregnation; for, notwithstanding that which contained the *foetus* was placed almost directly in a line with the axis of the right *vagina*: yet this probably was not its original position; but by degrees its bulk increased so much as necessarily to occupy the middle space, and push the unimpregnated one aside. But, however surprising it may seem at first view, yet there is reason to imagine, that the right womb, though at a greater distance, would be much more apt to conceive than the other, if the left *vagina* only had been made use of. For when this was distended, it appeared that the posterior part of the *septum*, by its protuberance, closed up and covered the left *os tinea*; and, as such would probably be the case in copulation, the *femen* not finding a ready admission into it, would pass over to the right orifice, where its entrance could not be so much obstructed. So that, if we may hazard a conjecture, I think it more likely, since the right *uterus* alone conceived, that the left *vagina* had generally been employed.

It was a prevailing opinion among the ancients, that male children were conceived in the right side of the womb, and females in the left. Having so few opportunities of dissecting human subjects, they depended too much on the analogy of the structure of brutes, which has been the principal source of the many erroneous descriptions which we meet with in their works. It is well known that the *uterus* of many quadrupeds is divided into two *cornua*, in which the *foetus* are lodged;

lodged; and it was not very absurd to conclude, that Nature might have formed them for the distinct repositories of the two sexes. Accordingly this was supposed to take place in the human *uterus*, which has been described and delineated as if distinguished into two chambers. Hence arose the opinion, which is received in some places to this day, that a very sure prognostic, with regard to the sex of the child, may be drawn from the side of the belly on which the tumour is more sensibly felt. Dissections being now more frequent have proved, that the human womb generally has only one undivided cavity; so that the *foetus*, let it come from which tube it may, will, when arrived to a certain size, occupy it entirely. This observation, however, is not sufficient to refute the supposition that each sex might have its peculiar *ovarium*; and some authors pretend, that they are able to determine how many males or females any animal has brought forth, by examining the number of *cicatrices* on its *ovaria*. For, when females only had been produced, the right *ovarium* was found still full of *vesicles*, but the left quite exhausted. That this is not always the case in brutes, appears from the observation of Dr. HARVEY, who frequently found male *foetus* in the left *cornu*, and females in the right. In the human subject, opportunities of ascertaining this matter must occur very seldom. We have an instance, recorded by CYPRIAN, where both a boy and a girl were conceived, although the right tube was wanting. But the present case affords another example, which is decisive; for here the impregnated *uterus* had not the smallest communication with the left *ovarium* or tube, and yet it contained a female *foetus*.

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The *septum* was not merely membranous, but fleshy, and of a considerable thickness; and, like most other *mediastina* in the human body, consisted of two *laminae* combined. Of these each *vagina* furnished one; for each had its own *constrictor*, and, being completely surrounded by muscular fibres, had a power of contraction independent on the other; which could not be effected if both *vaginae* were comprehended within the same muscular rings, and separated by a membrane incapable of action.

It has been the opinion of many modern authors of the first reputation, that the *fundus* is that part of the womb, whose extent increases, in the greatest proportion, during pregnancy; and upon this supposition, they have founded various theories. One of the principal arguments which they propose, in support of their opinion, is, that the insertion of the fallopian tubes is removed from the angles of the *uterus*, and gradually descends towards its neck, so that a short time before delivery they are at a very great distance from their former position. HALLER does not attempt to deny these facts; but mentions three instances where the tubes did not change their place. But PETIT, in his *Memoire* on the cause and mechanism of child-birth, is clearly of opinion, that the whole doctrine is destitute of foundation. He asserts, that the *fundus* increases less than any other part, and that the surprising growth of the womb is effected by fresh supplies of fibres, successively furnished by the neck and parts adjoining. As a decisive proof, he insists, that the insertion of the tubes continues nearly in the same place, and accounts for the error of the abovementioned

tioned authors by observing, that as the *fundus* is pushed upwards by the growth of the other parts, a greater portion of the tubes will adhere to the surface of the womb, and thus the apparent place of insertion be very far distant from the real one. This remark is verified in the present instance; for the tube at first sight appears to penetrate into the middle of the *uterus*; but, upon a closer inspection, and by introducing a bristle, it is found to run for a considerable space between it and the coat, which it receives from the *peritonæum*, and at length to enter into its cavity not very far from the spot which it may be supposed to have occupied before impregnation.

With regard to superfœtation, it is evident how easily it might have been effected in the present subject; and the supposition of a double *uterus* can readily account for it on many other occasions. But this is a matter on which it would be needless to dwell any longer, as it has been very fully treated in GRAVEL's Dissertation, published in HALLER's Collection; where we meet with a similar instance of two *uteri* and a *vagina*, the anterior part of which was divided by a *septum*; but whose posterior portion was single, where the *septum* was discontinued. HALLER, in his *Opuscula Pathologica*, gives the history of a young lady of quality who had two wombs, each of an oval shape, and furnished with its own peculiar *vagina*. One of these *vaginae* was anterior, and communicated with the right womb; the other was posterior, and led to the left. And it is worth observing, that in these two cases, and in most others of the same kind, which have been hitherto observed, each *uterus* had only one *ovarium* and one tube.

A double

A double *uterus* is described by O. ACREL, in a treatise printed at Stockholm, in 1762; and in the seventh volume of HALLER's *Elementa Physiologiæ*, various authors are referred to, who deserve to be consulted upon this subject. In some of these we find examples of two wombs, or one *uterus*, divided into two *cornua*. In other instances the *uterus* retained its proper external appearance, although it was really double, its cavity being divided by a *septum*.

Since, therefore, it is certain that, in the structure of the parts of generation, Nature frequently deviates from her ordinary course, practitioners in midwifery ought to consider how many difficulties they may, perhaps, be exposed to by not attending to the possibility of sometimes meeting with those organs formed in the same manner as in the subject of this essay. An attention of this kind would probably have been of the utmost consequence in the present case; for the orifice of the unimpregnated *uterus* was so far dilated, as easily to admit two fingers, which might have arisen from the attempts of the midwife to bring on delivery: nor can we conceive any thing more vexatious than such a case would prove, were it to fall into the hands of an inexperienced person; as the orifices of the different wombs presenting themselves alternately to his touch, he might entertain doubts of the pregnancy of his patient, even when her labour was approaching; and, by endeavouring to dilate the left *vagina*, all his efforts to promote delivery would only serve to render it more difficult, or perhaps impracticable.













