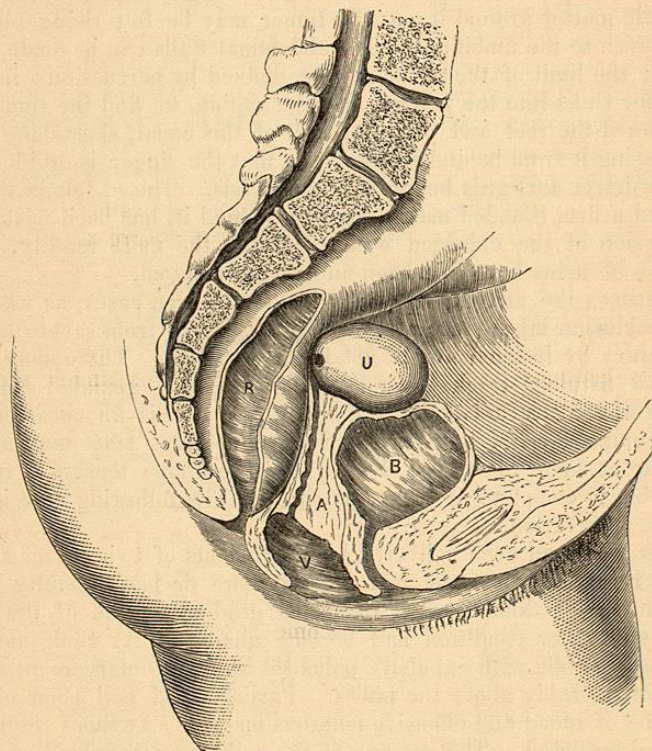


about an inch above the external surface. Offensive ichor, mingled with dirty-white clots, escaped. She made a good recovery.

In the first edition of this work (p. 204) is also related the case of Mrs. W—. Since that publication the case has issued in a catastrophe especially interesting as illustrative of atresia. After recovering from yellow fever in South America she suffered from aggravated dysmenorrhœa, inducing despondency and other nervous symptoms. The vagina was represented by a wide shallow cul-de-sac, not an inch deep. About the middle of this sac was a small round hole, which just admitted the point of the sound. Pursuing this track for two inches, a small solid body was felt by the finger in the rectum, which I concluded to be an imperfectly developed uterus. Whether the atresia was congenital or acquired is uncertain. It might have dated from the yellow fever. The parts were dissected up at two sittings, and a free communication made

FIG. 64.



Atresia of Vagina.

R, rectum; B, bladder; U, uterus; V, cul-de-sac at vulva; A, dense tissue in place of vagina traversed by a narrow fistulous tract between V and uterus (R. B.).

with the uterus. The new vagina was kept open by a Hodge's pessary. A month after the last operation, the vagina was well preserved, and examining by a Fergusson's speculum during a period, I could see the menstrual fluid being poured into the summit of the vagina. For the

first time she was menstruating without pain, and her health and spirits were already improved. She menstruated healthily several times; her health was fairly restored. Then her husband joined her. A few months after this she was seized suddenly with signs of "abdominal shock" and collapse, and died. The cause, as I was informed, was rupture of an ectopic gestation cyst. The uterus was probably two-horned, and the gestation an instance of gestation in the imperfectly-developed horn. The issue, lamentable and beyond prevision, proves, nevertheless, the success of the operation. I have endeavored to represent the state of the parts before operation in Fig. 64.

Dr. Gardner cites<sup>1</sup> from Meigs "a case of unusual form of stricture of the vagina, which was the cause of an almost fatal error in diagnosis." The stricture was traversed by an extremely narrow fistula just permitting of what has been called "stillicidium menses." Professor Thomas<sup>2</sup> describes a similar case.

Simpson described "a kind of adhesive or obliterative vaginitis" in adults, differing in some respects from the adhesive vaginitis of infants. In infants the inflammatory closure is usually limited to the orifice of the vagina, and produces complete occlusion. In adults it generally commences at the upper part of the vagina, spreads gradually downwards, and seldom produces complete occlusion. It is almost always attended with a circumferential contraction of the canal at the site of the disease, so that when it is limited, as it often is to the top of the vagina, the os uteri is felt drawn up to the apex of a narrow conical or funnel-shaped cavity. But it occurs without this circular contraction, says Simpson; and I feel justified by observation in affirming that this funnel-shaped contraction of the upper part of the vagina may occur independently of inflammation. The adhesion is more agglutinative, like that which unites serous surfaces in the early stages of inflammation, than true fusion. The finger can separate the adhering surfaces.

It is a remarkable circumstance in connection with the history of atresia, or absence of the vagina, where no uterus can be found, or at least only such a rudimentary one as to be incapable of performing the functions of a uterus, that the artificial formation of a vagina brings considerable relief. Of this I have seen examples; one especially was that of a well-developed young lady, who had suffered from what may be called difficult ovulation; there was evidence of menstrual molimina, but there was no discharge. I dissected up a canal between the rectum and bladder; a good vagina was maintained by wearing a Hodge's pessary; and she recovered health, remaining free from pain, and married.

This, and other cases (see Dr. Clarke's case, p. 182), and one which I may specify of a young woman at St. Thomas's Hospital, prove that ovarian development may be good, and the uterus remain undeveloped. They prove that the general frame may be well developed, notwithstanding the want of a uterus, and that the evolution of the general frame is due to the ovaries.

*Treatment.*—In the case of apparent absence of the vagina there are

<sup>1</sup> Gardner on Sterility, New York.

<sup>2</sup> Diseases of Women, Philadelphia, 1869.



three methods of proceeding. The first is to cut a channel through the tissues between the urethra and the rectum up to the uterus. The second, adopted by Fletcher (*Lancet*, 1830-1831) and Amussat (*Gazette Médicale*, 1835), is to tear or stretch out a canal by the fingers or other dilating instruments. The third may be called the mixed method, making use both of cutting and dilating. The last combines the advantages of the two preceding, and at the same time reduces their disadvantages. Whatever mode is adopted, the patient is placed in lithotomy position, the place between the urethra and rectum is carefully examined, the index of the left hand is passed into the rectum, the sound is passed into the bladder, and feeling for it by the finger in the rectum, the amount of tissues available for burrowing, and the position of the uterine tumor are determined. Then, the sound is held up under the pubic arch, whilst the finger carries the rectum away in the opposite direction. A transverse incision is made in front of the anus through the skin, then cautiously nicking with the knife or scissors and stretching out with the fingers, working, *from side to side*, between the finger in rectum and the sound in urethra as guide, a canal is opened to the uterus. Care should be taken not only to make all incisions laterally, but to work backwards towards the rectum, as the chief danger is that of penetrating the wall of the bladder. If the os is felt, a sound should be tried first; if the os be impervious, it may be perforated by a trocar or by the knife. It may be desirable to carry out the proceeding at different sittings. It will generally be necessary to place a tent or bougie in the uterine opening to prevent closure; and the artificial vagina must be preserved by plugging with lint steeped in carbolic oil, glycerine, or what I have found to answer better a narrow Hodge pessary. The tendency of the parts to contract and close again after operations for the restoration or formation of a vagina is very great. The operation may have to be repeated, unless great care is taken to preserve patency by artificial means.

Where the closure of the vagina is the result of cicatrices from sloughs, the same cautious mode of dissecting and dilating may be adopted. Where the vaginal canal exists, and there is closure of the vulva by agglutination of the nymphæ, or from imperforate hymen, the preponderance of testimony is in favor of making an opening into the vagina. The distended fluctuating membrane indicates the spot. This is pierced by a trocar, or better by a knife.

*Imperforate Hymen.*—It has frequently been discussed how the catastrophe of sudden escape of the retained fluid into the peritoneal cavity can best be averted. Is it better to make a very small opening in the hymen and let the fluid drain away gradually, hoping that in this way the suddenness of the collapse of the uterus might be diminished? This is the plan I have hitherto followed. But others have preferred making a free incision at once, and even proceeding to wash out the cavity. I am not sure that this is not the best plan. A free external outlet would make it easier for the contracting uterus to expel its contents by this route, and thus take off the pressure towards the tubes. On the other hand, the rapid retreat of the uterus would favor laceration of the tubes, if held back by adhesion. The balance of advantages and of drawbacks of either plan is difficult to strike; and it is to be apprehended that cases

will continue to occur in which a fatal result will follow any method of treatment.

A plan which I should be disposed to try is to draw off a little at a time by the aspirator-trocar, so as to effect a very gradual diminution of the cavity before finally freely dividing the obstruction. In any case absolute rest should be rigidly enforced. On no consideration should even simple puncture of an imperforate hymen be done in the consulting room. I believe the opening should be sufficiently large to admit of easy evacuation, and that to prevent the entry of air a compress should be applied over the uterus and sustained by moderate pressure with a bandage. In some cases injections of warm water have been used to wash out the uterus. It is doubtful whether this is good practice at the time of the operation, but if there should arise decomposition, the gentle injection of a weak solution of permanganate of potash or carbolic acid will be desirable. After a few days it is proper to enlarge the opening by removing a circular piece of the membrane.

Absolute rest in bed for some days is a wise precaution, notwithstanding the histories of cases where impunity has followed its neglect. Symptoms of peritonitis, indicating that retained fluid has suddenly escaped into the peritoneal cavity, have set in on the third or fourth day. The contraction of the uterus leading to this catastrophe does not take place immediately after the operation. The greatest care therefore is necessary for some days afterwards.

Drs. Ramsbotham and Lefort collected several cases in which simple puncture of imperforate hymen terminated fatally. Simpson relates a case of occlusion of the vagina from adhesion causing a septum of no great thickness. Retention of menstrual fluid was going on, so a very small incision was made; the patient remained well for two or three days, great quantities of the usual dark grumous fluid constantly escaping by the vagina. On the third day surgical fever set in, and in a few days she died. The autopsy showed that the interior of the distended uterus had become the seat of a very intense inflammation, which had spread thence, and led to a severe and fatal peritonitis. This was probably set up by air getting into the uterus and causing decomposition and septicæmia. It strengthens the argument for free incision and washing out the uterus.

In cases of *occlusion of the uterus* with retention of menses, the indication is to make a passage into the cavity. The opening into the uterus is best made by a fine-pointed knife. After piercing in the central point, the natural seat of the os uteri, incisions may be made *on either side*, and by carefully dissecting upwards, a passage is made into the cavity of the uterus. The fluid evacuated, it is necessary to introduce a tent—a metallic one is best—to preserve the opening, which would otherwise close, and lead to a repetition of the mischief. This liability is especially great in cases of contraction after amputation of the neck.

Some have advised puncturing by the rectum in preference, and even puncture of the uterus above the symphysis pubis has been recommended.

The experience of puncture of the rectum is not so favorable as to show any superiority over opening by the vagina. It is an imperfect operation, for the establishment of a vaginal canal would still be indicated when



relief from hæmatometra has been obtained. In cases where opening up the natural route is impracticable or too hazardous, opening by rectum may be resorted to as a temporary expedient. Fatal peritonitis followed in cases treated in this way by Antoine Dubois and Dupuytren.

Dr. Oldham (*Guy's Reports*, 1857) reports two cases in which puncture per rectum was practised. In one there was congenital absence of vagina; the os uteri was felt through the rectum, the trocar was made to pierce at this point. The operation was repeated on four occasions; at last the opening continued patent, and menstruation took place by the rectum. In the other case the vagina was closed by dense cicatrix; the os uteri was felt by rectum, and was punctured; relief followed. A third case at Guy's is reported by Dr. Hicks (*Medical Times and Gazette*, 1861): here there was an absence of vagina; puncture by rectum was followed by relief, and, as far as the report goes, there was subsequent amenorrhœa.

When these cases of retention have been relieved, and have apparently recovered, it must be remembered that the Fallopian tubes do not at once, perhaps not for a long time, recover their normal calibre. Some degree of abnormal dilatation remains. This is certainly the case in the partial retention due to stenosis of the cervix and to retroflexion. The knowledge of this fact is of the highest importance in practice. The long-continued obstruction having entailed dilatation of the uterine cavity, and catarrh of its mucous membrane, with very often a disposition to metrorrhagia, the physician is tempted to inject astringent fluids into the uterus. Fatal accidents have followed this practice, and much discussion has taken place as to the immediate cause of these accidents. The prevailing idea is that the injected fluid is driven along the tubes by the force of the syringe, its return by the cervix being stopped by the injecting tube which fills it. I am disposed to believe that where there is unusual patency of the Fallopian tubes this may occasionally be the case. But the more common mechanism, I am convinced, is that which I have just explained as occurring in retention from imperforate hymen. The astringent fluid thrown into the uterine cavity acts primarily as an irritant and constrictant. This action is forcible and rapid. The uterus instantly contracts and pumps on the fluid along the patent Fallopian tubes. That this was what occurred in a case in which a solution of perchloride of iron was injected into the uterus, on account of hemorrhage from retroflected uterus, in the London Hospital, seems to me beyond doubt. The tubes were found patulous, and fluid had run along them into the peritoneal cavity.

## CHAPTER VIII.

DYSMENORRHŒA—NEURALGIC; CONGESTIVE; FROM OBSTRUCTED EXCRETION; INFLAMMATORY; OVARIAN DYSMENORRHŒA; DYSMENORRHŒA MEMBRANACEA, OR EXFOLIATIVA.

DYSMENORRHŒA is the term used to express that menstruation is performed with difficulty and pain. It is a very frequent affection, being symptomatic of, or consequent upon, a variety of morbid conditions. These morbid conditions of course are mostly unknown to the patient; she applies for relief of the functional distress. To give the sought-for relief we must form a clear idea of the causes of the distress. The method by which this knowledge is arrived at is partly by clinical observation and study of the phenomena which present themselves, and of the condition of the organs involved; and partly by observation of the effects of treatment. It may be admitted that the means of treatment employed are sometimes empirical; that is, they are not directed by a clear comprehension of the cause of the distress; but if we find that this is frequently followed by success, empirical though it be at first, it will lead us to a clearer knowledge of the evil which it overcame, and thus it becomes rational.

By this double process we arrive at the conclusion that cases of dysmenorrhœa may be classified under the following heads:—namely, 1. Neuralgic, or sympathetic. 2. Congestive, or inflammatory. 3. Mechanical anomalies of the uterus. 4. Fallopian obstruction. 5. Ovarian disorder, constituting a distinct form of dysmenorrhœa.

The simple study of the subjective phenomena will not enable us to distinguish cases of one kind from those of another kind. Indeed, so long as this very imperfect method was exclusively pursued, all cases of dysmenorrhœa were confounded together, or the distinctions made were necessarily arbitrary and fanciful, and treatment, being aimed at random, was generally unsuccessful. This is a logical necessity. For the practitioner who limits his observation to the subjective symptoms must perforce exclude from his resources those means which are suggested by the objective method of investigation. Not many years ago, dysmenorrhœa was almost universally looked upon and treated as a nervous affection of the uterus itself, or sympathetic with disorders of distant organs, or the expression of constitutional debility. But in proportion as precise objective methods of investigation have been applied to the study, it has been discovered that in most cases the nervous phenomena are dependent upon distinct abnormal conditions of the uterus or of the ovary.

If, therefore, we still retain the term *neuralgic dysmenorrhœa*, we must do so on the understanding that, although expressing a really existing disorder, it is a convenient *asylum ignorantie*, under which we may class a number of cases, the true pathology of which eludes our research.