

**Uterus Bicornis Unicollis: Atresia of External Os:
Absence of Vagina: Retained Menses: Hysterectomy.***

By MILES H. PHILLIPS, M.B., B.S., F.R.C.S.,

Tutor in Gynæcology and Obstetrics, University of Sheffield;

Assistant Surgeon, Jessop Hospital for Women, Sheffield.

ON February 5, 1908, M. C., nearly 16 years of age, was sent into hospital by Dr. Frank Mason, of Handsworth, to whom I am indebted for the following history.

In October last Dr. Mason first attended her for what appeared to be a mild attack of appendicitis; pain in the right lower abdomen, with slight vomiting and obstinate constipation being the symptoms, whilst on examination he found a slight rise of temperature and pulse rate, rigidity of the right rectus and tenderness over McBurney's spot; the attack lasted three or four days. Similar attacks occurred in November, December, and January. Dr. Morris saw the patient for Dr. Mason in November, and he also diagnosed appendicular colic. The last attack was the most severe and the pain and tenderness were then found to be lower in the abdomen, just above the right Poupart's ligament. Dr. Mason then suspected the possibility of retained menses and found that the girl had not menstruated but also that her four elder sisters and her mother had not commenced before seventeen. The patient's mother stated that, previously to October, the girl had enjoyed splendid health, but for some months she had been dull and stupid.

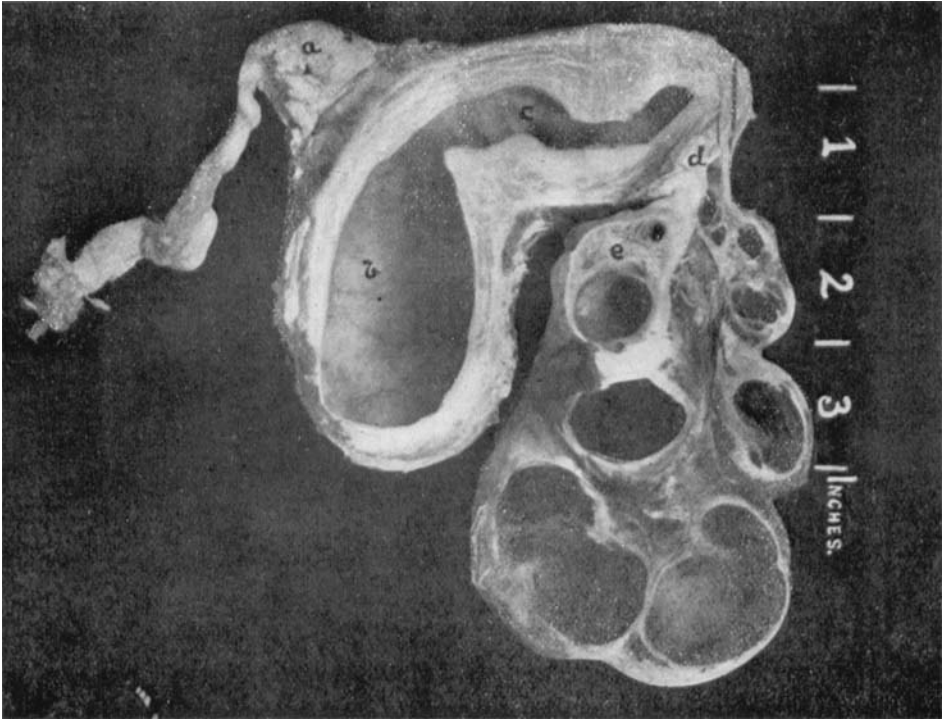
Notes of Condition on Admission. Well grown for her years. Slightly anæmic, very nervous and rather dull. Does not look ill. Is free from pain. Temperature, pulse, respiration and urine normal. Breasts and pubes fairly well developed. Abdomen appears normal and is soft; there is slight tenderness on firm pressure just above the right Poupart's ligament; no tumour can be felt. On proceeding to make a rectal examination it was noticed that, though the vulva appeared to be normally developed, there was no vaginal orifice. Per rectum a round, smooth, hard swelling of about the size of a duck's egg, could be felt in the middle of the pelvic cavity; its lower pole was about two inches above the anal orifice and presented a shallow dimple behind and to the right. Bimanually, the tumour was felt to extend considerably to the right and its upper pole could

* Specimen shown and described at a meeting of the North of England Gynæcological and Obstetrical Society, Sheffield, March 1908.

just be felt behind the right Poupart's ligament. There was no similar extension to the left. A diagnosis of a more or less complete atresia of the vagina with hæmatometra and probably right hæmato-salpinx was made.

Operation. On February 10, she was anæsthetised and examined in the lithotomy position. The vulva was found to be normally developed, except that in the situation of a vaginal orifice there was only a small, circular, shallow depression, about $\frac{1}{4}$ inch in diameter. This was almost surrounded by two lateral, crenated, fleshy folds, each about $\frac{1}{3}$ inch long by $\frac{1}{8}$ inch thick, which met in front just below the meatus, but merged, without meeting, behind into the mucous membrane of the fossa navicularis. They evidently represented the hymen which had retained its infantile labial form. By means of an easy perineal dissection through loose areolar tissue, the lower pole of the pelvic tumour was reached at a depth of $2\frac{1}{4}$ inches. Its deep situation and the apparent thickness of its wall pointed to a uterine rather than a vaginal collection of fluid. Then, a gauze plug having been left in the wound and the patient put in the Trendelenburg position, the abdomen was opened by a median incision extending from the umbilicus to the pubes (5 inches). It was at once obvious that we were dealing with a bicornute uterus whose single cervix and right horn were considerably enlarged. The right Fallopian tube, remarkably tortuous and distended lay to the right of, and behind, the uterus. Normal appendages were attached to the rudimentary left horn. The round ligaments were not hypertrophied and there was no median recto-vesical fold. The distended tube was now raised out of the rather deep pouch of Douglas, after some thin adhesions between it and a coil of pelvic colon and the back of the uterus had been divided. There was no free menstrual blood in the pelvis. The whole mass, excepting the normal left ovary, was then removed intact by the ordinary peritoneal flap method, special care being taken to press aside the ureters. The uterine arteries were both small and the dilated cervix was easily enucleated from its connective tissue bed. The larger vessels were ligatured with silk and the peritoneal flaps brought together by a continuous catgut suture. The vermiform appendix was seen to be healthy. The abdominal wound was closed in three layers. Finally the gauze plug was removed and a thin strip of gauze inserted into the lower half of the perineal wound. The patient bore the long operation well and left the table with a pulse rate of 84. She made an uninterrupted recovery and was sent to a Convalescent Home on the twenty-fourth day.

The specimen (see Plate) consists of a bicornute uterus with a single cervix, and its attached right appendages and left Fallopian tube. The cervix is enlarged to the size and shape of a hen's egg. The left cornu is a small solid fibro-muscular body projecting laterally from the upper end of the cervix. The right cornu is a rounded



Mr. Miles Phillips' case of Retained Menses.

- a.* Rudimentary left cornu.
- b.* Hæmatotrachelos.
- c.* Hæmatometra.
- d.* Ovarian ligament
- e.* Ovary.

elongated body almost equal in size to the cervix, to which it is attached at an angle of 120° . The left Fallopian tube appears normal to the naked eye but has a lumen in its outer half only. The right ovary is normal in size and is attached to the cornu by a well marked ligament. The right Fallopian tube is considerably enlarged into a series of saccules. It is bent once upon itself, the two limbs being adherent to each other and the abdominal end of the tube to the ovary. In this way is formed an irregularly lobulated mass, pendent from the outer end of the cornu, and exceeding in bulk the whole uterus. After hardening, superficial slices were removed from the posterior aspect of the uterus, the various parts of the right Fallopian tube and the ovary. All the cavities thus opened were found to contain a chocolate-coloured coagulum, which has been removed. The cornual cavity communicates with that of the cervix by a short circular channel, about $\frac{1}{2}$ inch in diameter; their walls vary from $\frac{1}{3}$ to $\frac{1}{2}$ inch in thickness and show smooth inner surfaces. The cavity does not extend towards the rudimentary cornu. The saccules of the Fallopian tube are thin walled, the larger being translucent; they are incompletely separated from one another by thin perforated septa. The outermost saccule is closely adherent to the lower pole of the ovary; there is no sign of an ostium or of fimbriæ. It was found possible to pass a fairly thick bristle from the cavity of the cornu into the first saccule of the tube. The section of the ovary opened a small blood cyst; otherwise it appears to be normal. Microscopically, the wall of the cervix shows a normal fibro-muscular coat with a very thin mucous membrane, whose epithelial lining is complete and composed of a single layer of cubical cells. The underlying glands are compressed, so that their long axes are parallel to the surface; in some the epithelium consists of tall columnar cells with basal nuclei and shows various stages of secretory activity. The fibro-muscular wall of the developed cornu appears normal; its mucous membrane is thin but typically that of a corpus uteri and characteristically altered by surface pressure. The wall of the hæmatosalpinx is markedly thinned; the vessels in its outer coats are much engorged; it shows a few stunted plicæ; its epithelium is composed of low cubical and flattened cells, poorly staining.

The section of the ovary is well stocked with ova in various stages of development; though the blood cyst is a distended simple Graafian follicle and not a corpus luteum, there are several corpora albicantia and areas of lutein cells in the stroma.

Remarks. The association of complete absence of the vagina with the presence of well developed external genitals and a menstruating, if malformed, uterus, is, so far as I can judge, of extreme rarity; hence I publish this case. Clinically, the similarity of the early symptoms to those of appendicitis is of interest in view of the

case recently reported by Dr. Thomas Wilson (*Proc. Royal Society of Medicine*, January, 1908); his patient was sent into hospital as an emergency case of acute appendicitis.

With regard to the treatment employed, no more conservative procedure was feasible, and indeed in the literature of the subject there is evidence that surgeons have considered it advisable to remove the healthy ovaries when performing hysterectomy in somewhat similar cases of atresia. In spite of the fact that no attempt was made to form a vagina, I considered it right to leave the unaffected ovary.