# UTERUS DIDELPHYS WITH UNILATERAL VAGINAL ATRESIA

## (Report of Two Cases)

by

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Unilateral partial vaginal atresia with double uterus is a rare congenital anomaly. On review of literature Gilliland and Dyck (1976) were able to find 34 cases and they added 2 cases of their own. In Indian literature isolated cases have been reported by Masani (1967), Hingorani (1972), Heera (1973), Raut (1976), Domadia (1977) and a total of 13 coses have been reported. The following 2 cases, seen at Medical College Hospital, Rohtak Haryana, are being reported because of extreme rarity associated with diagnostic problems.

**Case 1**

Miss M.D. 15 years, unmarried, was admitted on 6th May, 1972 with history of severe pain in lower abdomen for 6 months ever since the onset of menarche. Pain used to be severe, intermittent, localised to lower abdomen without any radiation to any site but used to get aggravated during menstruation. There was no history of fever, urinary or bowel complaints. Her cycles were 5-6/28 days regular, last menstrual period being I week ago.

On physical examination, slight pallor was present. Abdominal Examination: There was a tense, cystic, non-tender mass, 5" x 6" in size arising from pelvis and it was not mobile.

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*Accepted for publication on* 21-11-78.

**Veginal Examination:** Cervix was deviated to right and pointed forwards. Uterus was retroverted and normal in size. Cystic mass felt per abdomen was bulging through left fornix.

**Speculum Examination:** Cervix and vagina normal.

**Rectal Examination:** Mass was rather low down in the pelvis and could not be pushed out. A provisional diagnosis of ovarian cyst was made and laparotomy decided.

**Investigations:** Blood Hb. 11.5 Gm%. Total and differential leucocytic counts were within normal limits. Urine examination-nil abnormal X-ray chest showed no abnormality.

**Operation Notes:** Abdomen opened by infraumblical midline incision. On exploration of pelvic organs, there were 2 uteri. Right ovary, tube and right uterus appeared normal. Left uterus was enlarged and there was hematosalpinx of left tube which was adherent to the back of the left uterus. Left ovary was burried in adhesions. A small vertical incision made over left uterus and tarry material escaped. Hegar's dilator was introduced through this incision to trace the cervix and after making this project, a nick was made over vagina with assistant's finger helping from vaginal end. A catheter was left in the channel made between uterus and vagina. Abdomen was closed in layers.

Postoperatively, patient stopped draining tarry material from vagina on 5th day and examination revealed the communication had closed down and same was dilated with Hegar's dilator and small amount of altered blood was obtained. Catheter was left in the channel for 5 days, after which dilatation was done again.

I.V.P. done postoperatively showed absence

of left kidney and ureter, anatomy and function of right side being essentially normal.

Patient reported 1 year later for severe dysmenorrhoea and dilatation of left cervix under anaesthesis revealed collection of tarry material. Thereafter she has been asymptomatic.

**Case 2**

Mrs. R. B., 16 years, P0 + 0, married for 6 months, was admitted to Gynaecological ward on 2nd January, 1978 for pain in abdomen and excessive, foul-smelling yellowish vaginal discharge for 3 months preceded by amenorrhoea of 2 months. Pain was severe and used to start in right lumbar region and radiate to all over the abdomen. There were no aggravating or relieving factors and she had no urinary or bowel complaints.

Menarche 14 years

Past cycles, 4-5/28-30 days regular, last menstrual period was on 5th december, 1977. There was no history of dysmenorrhoea or dyspareunia.

**Physical Examination:** General condition good. Pulse rate 88/min., BP 110/80 mm Hg. Pallor present.

**Systemic Examination:** No abnormality.

**Pelvic Examination:** Cervix high up behind the pubic symphysis and deviated to left. Body of uterus appeared retroverted and normal in size. There was a cystic, non-tender mass of 4½" x 2½" size with smooth surface bulging into the vagina and extending almost upto right lateral pelvic wall. **Speculum Examination:** Purulent discharge present. Cervix was rather high up. A provisional diagnosis of a vaginal cyst or a retroperitoneal cyst was made.

**Investigations:** Hb. 10.5%, TLC 6000/cumm $P_{84}L_{10}M_0E_6$. Urine and stool NAD. X-ray chest NAD. Blood urea and blood sugar were within normal limits. Vaginal swab culture yielded E. coli organisms sensitive to all antibiotics. On IVP, left kidney and ureter were normal in anatomy and function but right kidney and ureter were not visualised even on double dose of dye.

Under anaesthesia needle was put in the cystic mass through right fernix and 60 cc chocolate coloured pus was aspirated. Pus culture yielded pseudomonas aerogenosa sensitive to all antibiotics. Patient received injection streptopenicillin and terramycin vaginal tablets for 10 days followed by capsule tetracycline, cap. chloromycetin and chloromycetin vaginal ovoids for 8 days. Purulent vaginal discharge disappeared after this but cystic mass persisted and laparotomy was decided.

At laparotomy, there were 2 uteri of the same size. Left ovary and tube were normal. Right ovary and tube were incorporated in a mass 4" x 3" which was adherent to the back of the right uterus. After separating the adhesions, right salpingo-oophorectomy was done. Cystic swelling felt earlier through right fornix could still be palpated but was of smaller size now. This was a second vagina not communicating with the left vagina. Half an inch incision was made over the lower end of this blind vagina so as to communicate it to left vagina and offensive pus was drained and after introducing a finger through this opening, right cervix could be felt. Patient continued to drain pus from right vagina for 40 days when she was discharged on 24th March, 1978, with advice to report 3 months later for excision of vaginal septum, which was done on 14th October, 1978. She was discharged a week later with roomy vagina with 2 cervices and double uterus.

**Histopathology report:** Fallopian tube and ovary showed diffuse infiltration by chronic inflammatory cells, plasma cells and lymphocytes. Fimbrial cyst was also seen.

*Comment*

Diagnosis of uterus didelphys with unilateral vaginal atresia is usually difficult as on one side uterus and cervix are well developed with patent vagina through which the patient menstruates regularly, whereas on the other side uterus and cervix are developed without communication to the lower vagina due to atresia of upper vagina resulting in the formation of hematometra and hematosalpinx on that side. One can seldom suspect hematometra in a patient who is menstruating regularly. Since the cervix of uterus with hematometra is also not accessible to inspection and palpation, condition is often missed.

Most patients with this anomaly have

dysmenorrhoea at the onset of menarche, progressively increasing in severity with each subsequent period and a unilateral pelvic mass (Masani, 1967; Gilliland and Dyck, 1976). In the present communication, the first patient had dysmenorrhoea ever since onset of menarche along with a mass hematometra and hematosalpinx lying rather low in the pelvis. Second case who had hematocolpos but no hematometra, however, denied any history of dysmenorrhoea.

Intravenous pyelography revealed absence of kidney and ureter on the side of the vaginal atresia in both the cases and this has been found in 23 of 36 cases reviewed by Gilliland and Dyck, 1976. Klaften (1931), Woolf and Allen (1953) and Chawla *et al* (1963) had similar experience of finding abnormalities of kidney and ureter in the form of absence in the cases with genital tract anomalies.

Diagnosis is hardly ever made preoperatively and the condition is usually discovered at the time of laparotomy. Management depends upon the extent of non-canalised vagina. However, if the fibrous septa is small and a communication can be made between the vagina and cervix, it should be resorted to since hemi or total hysterectomy along with excision of non-canalised vagina is a tedious operation associated with blood loss and postoperative complications. According to Gilliland and Dyck (1976), pregnancy rate was higher (33%) in women with minor surgery (12 cases) in the form of excision of septum as compared to a lower pregnancy rate (12.5%) achieved in 24 patients who had major surgery (laparotomy, salpingectomy, hysterectomy). In the present communication, in the first case channel was made between the cervix and vagina, whereas in the second case salpino-oophorectomy was done because of tubo-ovarian mass and drainage of mucocele of vagina was done followed later by excision of vaginal septum.

*Summary*

Two cases of uterus didelphys with unilateral vaginal atresia are reported. Both patients were young (15 years and 16 years). Ipsilateral renal agenesis was found on affected side. First case had hematometra and hematosalpinx where communication was made between vagina and cervix. Second had tubo-ovarian mass along with mucocele of vagina, where right salpingo-oophorectomy and drainage of mucocoele was done followed by excision of septum later.

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