HAEMATOCOLLIS

(Report of four cases with review of the literature)

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Obstructive lesions of the genital tract leading to accumulation of the menstrual blood may be congenital or acquired. Haematocolpos is not infrequently seen in the gynaecological out patient department whereas haematometra and haematocollis are very rare. Congenital atresia of the cervix of a normal uterus or of a bicornuate uterus and without absence of the vagina is rare. In the literature so far only two cases of haematocollis have been reported by Jeffcoate. In both these cases there was non-canalisation of the vagina with haematocervix with a normal uterus. In these cases an artificial vagina was constructed and communication was established between the cervix and the vagina by an abdominal operation. Das *et al* (1971) have reported one case of haematocollis of acquired variety. On account of the extreme rarity of the condition the following cases have been presented.

CASE REPORT

Case I

Mrs. M. aged 20 years, married for 6 years was admitted in the Zenana Hospital, Jaipur on 15-10-70 with the history of primary amenorrhoea and dull aching pain in the lower abdomen.

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Received for publication on 9-9-71.

General and abdominal examinations did not reveal anything in particular. Secondary sexual characters were well developed.

Examination Per vaginam: The vagina was of normal depth and there was a soft cystic swelling, size of 7.5 cm × 7.5 cm. at the vaginal vault in the place of the normal cervix but no external os could be palpated. The uterus was bulky and firm and felt 'sitting' on top of the soft mass.

Per Speculum examination: The vaginal walls were normal, a small depression was seen at the vault of the vagina which was probably the external os.

Rectal examination revealed the same findings.

Provisional diagnosis was haematometra and haematocollis. Intravenous Pyelography did not reveal any abnormality.

Operation: On 21-10-70 under spinal anaesthesia an attempt was made to pass a probe through the depressed area at the vaginal vault. As it failed, a laparotomy was performed. The uterus was enlarged to 8 weeks' pregnancy size, both tubes and ovaries were normal. The cervix was ballooned upto 7.5 cm. in diameter. Haematometra and haematocollis were drained by a vertical incision on the anterior wall of the uterus. A kidney tray full of old blood was drained. After draining the hematometra an attempt was made to canalise the cervix by passing a probe down from the uterine incision. The point of the probe was felt per vaginam by the assistant. A nick at the point of the small depression seen at the vault of vagina was made over the point of the probe and

old tarry blood came out through that opening. The opening was dilated with the dilators. The uterine incision was stitched. Abdomen closed in layers. In the post operative period patient developed hyperpyrexia and it was due to the development of a pyometra which was drained by dilatation of the cervical canal. Opening of the external os was kept patent by repeated dilatation of the cervix. Patient was discharged on 25-12-70. Patient had two normal periods after the operation. She came for check up on 15-4-71 and the cervical passage was found to be patent.

Case 2

Mrs. R. aged 14 years, married for 9 months was admitted on 16-2-71 with the history of severe pain in the lower abdomen for 4 days. Menstrual history revealed that she had not yet started menstruation. There was no history of previous abdominal pain. General and systemic examination did not reveal any thing in particular except that the pulse was 120/min.

Abdominal examination: A firm, nontender lump, partially mobile from side to side was felt on the right side of the lower abdomen arising from the pelvis and extending upto 5 cms. above the right inguinal ligament.

Vaginal examination: Depth of the vagina was normal, external os and cervix was sot felt. A diffuse cystic lump was felt in the right fornix, extending upto 4 cms. above the right inguinal ligament. Uterus could not be made out separately.

Speculum examination revealed a bluish area on the right side of the vaginal vault.

The provisional diagnosis was haematometra and haematocollis. She was posted for operation on 20-2-71. Vaginal and speculum examination under anaesthesia revealed the same findings. As the external os could not be seen a laparotomy was performed. On opening it was seen that the uterus was 8 weeks' size, soft due to haematometra and the cervix was balloned up with blood due to haematocollis to the size of 10 cm. diameter. Both tubes and ovaries were normal. A nick was given in the uterus and the haematometra and haematocollis was drained. An attempt was made to canalise the external os of the cervix by passing a probe down from the uterine incision. The point of the probe was felt in the vagina over the bluish area by the assistant. A nick was made at the point of the probe thus forming the cervical passage. The uterine incision was closed and the abdomen closed in layers. Post operative period was uneventful. She was discharged 27-3-71. She came for check up on 5-5-71 and examination revealed patent external os and uterine sound could be passed easily. She had two normal periods after the operation at the time of the report.

Case 3

Mrs. V. 16 years of age married for 2 years was admitted on 16-3-71 with history of primary amenorrhoea and pain in the abdomen for 9 days. General and systemic examinations did not reveal anything in particular.

Abdominal examination revealed a midline swelling about the size of 22 weeks' pregnant uterus, partially mobile from side to side and was not tender.

Per Vaginal examination: The vagina was of normal depth. External os could not be palpated. A lump, partly cystic, partly firm, was felt in all the formices which was rising into the abdomen upto the umbilicus.

Speculum examination did not reveal any opening of external os of cervix.

The provisional diagnosis was haematocollis and haematometra. On 17-3-71 laparotomy was performed. Uterus was of 10 weeks' size, the cervix was distended about size of 10 cm. diameter. Both tubes and ovaries were normal. The haematometra and haematocollis was drained by making a vertical incision into the uterus. The probe was passed down into the cervical canal and a nick was made at the point of the probe and the cervical passage was formed. Incision into the uterus was closed and abdomen was closed in layers. On 20-4-71 patient developed pain in the abdomen and a lump was felt on the right side of the lower agdomen. She was advised dilatation of the cervical canal but she refused and was discharged against medical advise on 27-4-71 and did not come for a check up.

Case 4

Mrs. U. age 20 years was admitted on 29-3-71 with the history of periodic attacks of pain in the lower abdomen every month for the last one year which used to last for 15-20 days.

General and systemic examinations did not reveal anything in particular.

Abdominal examination revealed a tender non-mobile lump in the lower abdomen 5 cms. above the symphysis pubis. The lump was more on the right side.

Vaginal examination: The vagina was of normal depth but external os could not be palpated. A lump, firm in consistency, was felt in all the fornices extending more on the right side for about 5 cms. above the symphysis pubis in the midline, and also a mass of 5 cm. diameter was felt in the right fornix. The uterus was not made out separately.

P.R.: Same swellings were felt per rectum. Speculum examination did not show opening of the external os.

Provisional diagnosis was haematometra. Laparotomy was done on 31-3-71 and haematometra, haematocollis with bilateral haematosalpinx which had burst into both the broad ligaments were found.

The uterus was enlarged to 8 weeks' size. The haematosalpinx on the right side was 10 cms. × 5 cms. and on the left side it was 7.5 cms. × 2.5 cms. There were broad ligament haematomas on both the sides. The fimbrial end of both the tubes were closed. A small nick was made over the broad ligament haematomas on either side and tarry blood came out. When an incision was made on the uterus tarry blood came out from the uterine cavity and the blood from the tubes also escaped into the uterus, thus reducing the haematosalpinx. Bilateral salpingostomy was done. Then an attempt was made to canalise the external os of the cervix by passing a probe down from the uterine incision. A nick was made at the point of the probe and thus an opening was formed which was further dilated by dilators passed through the uterus. Uterine incision was closed and abdomen was closed in layers. The post operative period was uneventful. The dilatation of the cervical canal was done every week. The patient was discharged on 5-5-71 with no lump in the pelvis. She came for follow up and had two normal periods without any pain. On vaginal examination no abnormality was detected.

Discussion

Atresia of the cervix may be due to congenital or an acquired lesion, the latter being more common than the former. Obstruction may be at the external os, in the canal or at the internal os. Internal os is the common site for both congenital and acquired type. Cervical atresia usually leads to haematometra though the possibility of haematocollis occuring is also there. Haematometra is an interesting clinical gynaecological condition. It is met with in children, in adult unmarried and married women and at any age. It may result from the congenital malformation of the genital canal or as an acquired condition. Being extremely rare its diagnosis is often missed. That it is not a common gynaecological complication is further evidenced by the fact that there are few contributions in the literature on this subject. Masani (1966) collected 13 cases of cervical atresia with haematometra of which a congenital lesion was present in 6 cases (46%). The largest number of reported cases of haematometra in gynaecological literature are of congenital malformations. Acquired factor was present in 7 cases. None of the thirteen cases had haematocollis.

Study of 100 cases of obstructed cervices by Melody, (1957) revealed that 30 cases were congenital whilst 70 were due to acquired lesions. The site of obstruction in congenital variety was external os in 2, internal os in 26 and cervical canal in 2 cases. Congenital obstruction of the cervix is the result of (1) hyperplasia of the cervical ridges and the so-called palmate folds and (2) incomplete canalisa-

tion or failure of canalisation of the caudal ends of the fused Mullerian ducts. Neither clinical nor radiographic technique differentiates which of the two factors may be primarily responsible in a given instance.

In acquired atresia it was either due to trauma, amputation, infection like gonococcal or tubercular, cauterisation, neoplasm or post irradiation.

Atresia of the cervix causes haematometra and haematosalpinx. If obstruction is at the external os it causes haematocollis also. In our 4 cases there was haematocollis and haematometra and in one case there was bilateral haematosalpinx also and the site of obstruction was at the external os as evidenced by the development of haematocollis.

The most important symptom in congenital atresia of the cervix is cryptomenorrhoea. Patient is more likely to present with attacks of severe abdominal pain occurring at monthly intervals with primary amenorrhoea, as seen in case 4. Other patients had pain in the abdomen, one had dull aching pain and the rest 2 had severe abdominal pain. All of them had primary amenorrhoea. The tumour then consists of distended uterus, cervix and tubes and is not likely to be as large as a haematocolpos because the severe pain forces the patient to seek advise at an earlier stage. The uterus enlarges to 3-4 months' size of pregnant uterus, the cervical canal is ballooned out by the haematocollis when obstruction is at the external os, as is seen in our cases. The external os may be hardly palpable or visible on speculum examination or seen only as a pigmented puckered point at the apex of the vaginal vault.

In all these cases laparotomy was performed because the opening of the external os could not be seen. After incising the uterus, the probe was passed into the uterine cavity down to the cervix upto the vagina where its point could be felt at the site of the external os. A nick was made by the knife over the tip of the probe with some difficulty. The opening was kept patent by repeated dilatation. Cases 1, 2, 4 came for check up and they had 3 regular periods without any pain, the external os was visible on speculum examination.

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