Case report

Case of postoperative haematometra in a 40-year-old woman

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Introduction

Haematometra is a condition where blood collects in the uterine cavity when the outflow is obstructed. The commonest causes include congenital absence of the cervix or vagina and cervical conization. With the increasing rates of operative delivery in developing countries, untrained doctors are performing operations. This case report describes a woman with haematometra after caesarean section 4 years previously due to inappropriate uterine closure, which had obstructed the cervix and created a uterine pouch where blood had collected over several years.

Case report

A 40-year-old woman presented to the gynaecological outpatient department of Shifa Foundation community health centre, with complaints of increasing abdominal distension and abdominal pain for the previous 4 years.

She was para 2 with no living children. She had married 13 years previously and had conceived spontaneously 1 year after her marriage and had a home delivery at term which resulted in a fresh stillbirth of an average weight baby girl. Two years later the woman was divorced. Her second marriage was about 5 years previously. Again, she conceived spontaneously. At term, labour pains started and a traditional birth attendant was called in. After trial of labour for 12 hours, the patient was taken to the local private clinic where she underwent caesarean section. The outcome was again a fresh stillbirth, a boy of average weight. After the operation the patient did not report having any bleeding.

One year after this delivery she went to a traditional birth attendant for treatment of infertility with "vaginal tablets and pessaries". Meanwhile the patient started having abdominal distension which was gradually increasing and associated with anorexia and nausea. She went to a local doctor who did an ultrasound and diagnosed ovarian cancer. She was referred to our clinic with this diagnosis.

When the patient came to our health centre she was emaciated with a body mass index of 16. A general physical examination and systemic examination were unremarkable. On abdominal examination she had 2 abdominal scars: 1 transverse supra-pubic and another sub-umbilical midline (extending from umbilicus to the pubic symphysis). The patient was certain that both these scars were from the caesarean section but she had not been given any explanation of the incisions by her doctor. There was a 32 × 30 cm abdominal mass which was smooth with regular margins that seemed to arise from the pelvis. The mass was mobile from side to side with no bruit over it. The mass was associated with a reducible paraumbilical hernia.

Her inguinal lymph nodes were not enlarged. On pelvic examination there were prominent veins over the upper thighs and vulva. The vulva was healthy. On speculum examination there was copious yellowish discharge which was sent for culture and sensitivity. The cervix could not be visualized. Bimanual examination revealed a large soft swelling in the left adnexa about 30 weeks size. The cervix, uterus and right fornix could not be identified.

A provisional diagnosis of right tubular ovarian mass or postoperative haematometra was made. An ultrasound and computerized tomography scan were advised, along with other baseline investigations which were supportive of the diagnosis of haematometra. Examination under anaesthesia was attempted to drain the haematometra vaginally but was unsuccessful. Therefore, after consent for hysterectomy, a laparotomy was planned. It was decided that an attempt for conservation of fertility would be made if possible since the patient was childless and wanted to conceive again. The abdomen was opened through a sub-umbilical midline incision in layers. Due to massive distension in a weak woman there was diverification of rectus muscle. Dense adhesions between the rectus sheath and omentum were carefully separated. A para-umbilical hernia was identified and reduced. The uterus was visualized and adhesiolysis was done to mobilize it. The right tube and ovary were not seen. The left ovary and tube were visualized. A small hole was made in the anterior uterine wall in the lower uterine segment through which all the old blood (3.5 litres of

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chocolate coloured fluid) along with clots was removed. But even after evacuation, the uterus appeared enlarged (24 weeks size), unhealthy, flabby and unable to contract and, since the left ovary was also unhealthy and cystic, a total abdominal hysterectomy with left oophorectomy was carried out. At the site of right ovary there were adhesions, indicating an oophorectomy in the past but no such history was available from the patient and relatives. We were unable to clearly identify the transverse cervical ligaments and cervical area because of the dense adhesions and distorted anatomy. After hysterectomy and left oophorectomy an attempt was made to correct the pelvic anatomy. Operative findings showed that a uterine pouch had been formed by stitching the anterior and posterior uterine walls at the time of the last caesarean section. The vagina was found to be lying on the extreme right side and anteriorly and not communicating with the pouch. Mesh repair of the hernia was done. The abdomen was closed in layers. The patient made an uneventful recovery.

The gross histopathology of the specimen showed uterine corpus, cervix, left tube, ovary and 4 lymph nodes. Microscopy showed the uterine endometrial glands were atrophic and the mucosa was badly damaged. The uterine mucosa and muscular layer were grossly infiltrated with inflammatory cells. Microscopy showed trabecular infiltration of tumour cells in the myometrium; lymphatic invasion was not apparent. This was a low-grade tumour that did not involve the ovaries or fallopian tubes. Two left and 2 right external iliac lymph nodes were examined and also found to be free of tumour. From the histopathology a diagnosis was made of endometrial stromal sarcoma or poorly differentiated granulosa cell tumour (secondaries from the ovary). The cervix was normal and the left ovary was normal with no tumour focus. Her ovarian tumour markers were sent for analysis and found to be normal. Immunohistochemistry analysis led to the final diagnosis of endometrial stromal sarcoma.

The patient was referred to the oncologist for further management. She was advised to have regular check-ups. After 1 year there was no evidence of any metastases or recurrent disease.

Discussion

We were unable to find any previous case report of postcaesarean section haematometra in the national or international literature, although we believe more cases may exist in developing countries, where unskilled health personnel are managing pregnant women in rural areas. Chang et al. reported a 30-year-old woman complaining of increasing dysmenorrhoea and progressive right lower-quadrant pain after caesarean section. A pelvic mass was observed and subsequently a congenital mullerian anomaly was diagnosed on serial examination. Theirs was the first apparent case of haematometra of the rudimentary horn of a unicornuate uterus [*1*]. Another case report of haematometra was seen when a woman with lactational amenorrhea had cervical conization to treat cervical intraepithelial neoplasia (CIN 3). She developed haematometra and did not resume menstruation. This case was diagnosed early by ultrasonic tomography and magnetic resonance imaging [*2*]. In another report a 13-year-old girl presented to the emergency department with a 12-hour history of lower abdominal pain and inability to pass urine. Investigations showed haematocolpos and haematometra [*3*]. Nowadays the commonly reported haematometra is basically secondary to cervical conization and endometrial resection procedures [*4*].

As for malignant changes in haematometra, as seen in our case, it has been internationally cited that endometrial malignancy and haematometra are related. In Greece a postmenopausal woman was investigated for a large cystic peritoneal tumour which turned out to be haematometra. Posthysterectomy histopathology showed superficial endometrioid adenocarcinoma of the uterine cavity [*5*]. In Taiwan a 64-year-old multiparous postmenopausal woman had an unusual manifestation of endometrial adenocarcinoma that presented with haematometra mimicking a large pelvic cyst [*6*]. Haematometra was more common in postmenopausal women with endometrial adenocarcinoma, uterine myoma and leiomyosarcoma presenting with it [*7*].

Conclusion

We recommend that the local authorities in rural areas of developing countries should keep a check on the expertise of doctors practising in their areas. It is the ethical duty of the doctor after carrying out a surgical procedure to follow up patients to detect any adverse sequelae.

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WHO monographs on selected medicinal plants ,Volume 4, November 2009

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