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Case Report

Haematometra Following Caesarean Section in A Primipara with Poor Fetal Outcome: A Rare, Avoidable and Costly Complication with Concerns: Case Report

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Abstract

Background: Haematometra which is a rare complication can occur after Caesarean section, thus leading to a presentation at a gynaecological clinic.

Case Reported: We report a case of a 32-year-old P_1^{+0} (not alive) woman who presented at the gynaecological clinic of our facility with secondary amenorrhea of 7 months duration and abdominal pain of 5 months duration. She underwent Caesarean section for prolonged obstructed labour with delivery of a fresh still birth neonate at term at another facility prior to presentation. An abdomino-pelvic ultrasound scan was ordered which suggested haematometra. She subsequently had dilatation and 200ml of serosanguineous blood fluid was sunctioned.

Conclusion: Haematometra which is a rare complication can occur after a Caesarean section with serious morbidities following poor surgical techniques especially in a primigravida with risk factors. The right surgical techniques should be employed to prevent these complications.

Keywords: Haematometra, Primigravida, Caeserean section, Poor surgical techniques, Dilatation and sunctioning.

INTRODUCTION

Haematometra is the accumulation of menstrual blood within the uterine cavity as a result of an obstructed outflow, usually caused by congenital abnormalities of the cervix or uterus [1,2,3].

Less commonly it can be acquired later on in life due to procedures that cause obstruction of the cervical canal [4,5]. Secondary or acquired haematometra occur in women with normal menses prior to amenorrhea. These conditions include dilation and curretage, cone biopsies, endometrial ablation or cryocoagulation etc. [1,6].

Haematometra following a Caesarean section is a rare and avoidable condition [7] with increased risk in cases with prolonged second stage (obstructed) labour and placenta praevia and previous Caesarean section [8,9].

Haematometra usually present with cramping pelvic pain, pelvic mass and urinary frequency or retention [10] as well as acute abdomen in the setting of uterine rupture [5]. When palpated the uterus will typically feel firm and enlarged [4].

Some of the complications of untreated haematometra include pyometra, pelvic inflammatory disease, peritonitis, endometriosis, hematosalpinx [11] & infertility [12].

The management of haematometra is surgical approach through either abdominal or vaginal route [13] and the one following Caesarean section is most commonly by dilatation and evacuation followed by a placement of an intra-uterine catheter, thus allowing for continuous drainage [6] as performed in this patient. We present a case of haematometra which developed post Caesarean section. This case study is discussed because of its rarity as well as to emphasise the importance of proper training for health professionals in order to reduce post-operative complications and thereby morbidity and mortality.

CASE REPORT

We present a 32 –year- old para1^{+0} who underwent a Caesarean section (fig.1) for prolonged obstructed labour with delivery of a fresh stillbirth male neonate at another health facility. She presented to us with secondary amenorrhea of 7months duration and cramping lower abdominal pain of 5 months duration. The patient reported that her LMP was 22/08/2022 prior to onset of pregnancy.

She had presented with acute abdomen and on examination her vital signs were stable and abdomen revealed uterus of about 16 weeks size, firm in consistency and tender. Vaginal examination showed a cervix that was stuck to (flushed with) the anterior vaginal wall with stenosed cervical os as depicted in (fig.2). The uterus was bulky, anteverted and adnexae were difficult to palpate on bimanual pelvic examination due to pain and also pouch of douglas was full.

Abdomino-pelvic ultrasound scan revealed a bulky uterus measuring 13.6cm in length with the widest diameter 6.17cm and contained intra-cavitory haemorrhagic collection with an estimated volume of 130mls as illustrated in (fig.3). The adneaxae were unremarkable with normal intra-abdominal organs and no ascites.

The cervical os was closed with AP diameter of 1.52cm. Serology (HBsAg& RVS) were non- reactive. FBC (PCV-31%), WBC- 6.79 ×10^3|ul, and PLT count-288× 10^3|ul. E, U&Cr, clotting profile and urinalysis were also normal. Blood was grouped and cross matched for her. She had dilatation and suctioning of blood from the uterus under spinal anaesthesia in the theatre.

The anterior lip of the cervix was grasped with a vulsellum forceps, cervix was then dilated after the bladder was catheterized with Hegar's dilators (up to number 8) (fig.4) and approximately 200mls of menstrual effluent was drained (fig.5) and karmer's canular size 7mm (fig.6) was used for suctioning instead of the dilatation and curretage (D&C) as documented in some literature [6,14].

This is to prevent uterine perforation which is one of the complications of the procedure [15] when D&C is used. The bladder was catheterized to prevent further injury to the bladder (fig. 4).

Intra-uterine foley's catheter size 8 was then inserted and removed on the 10th day post- operatively. Her menses resumed, the following month and has continued unabated till date.

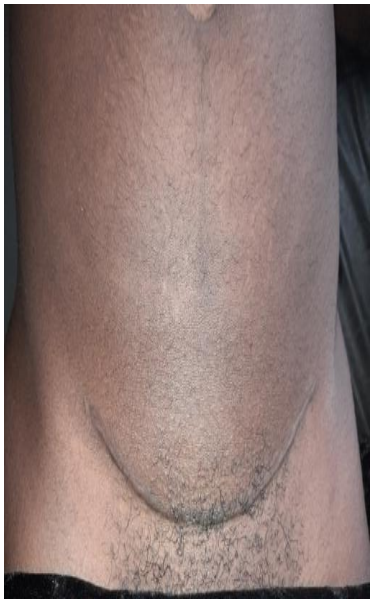

Figure 1

Figure 2

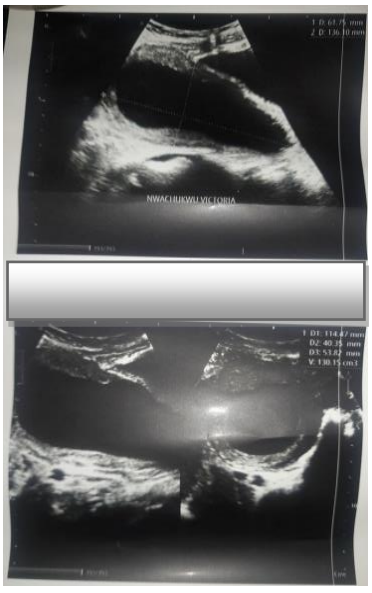

Figure 3

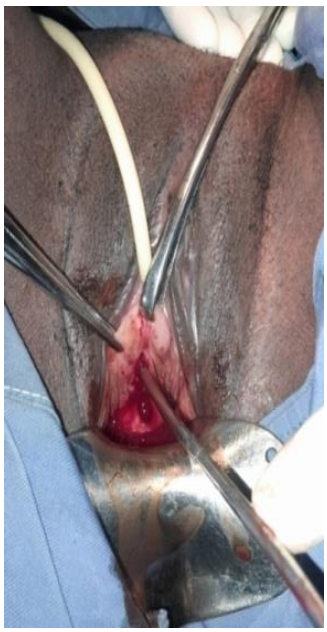

Figure 4

Figure 5

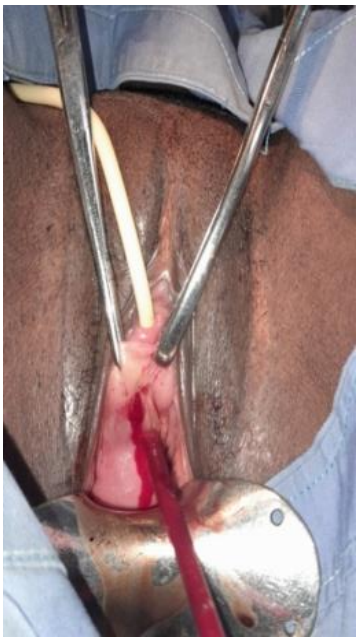

Figure 6

DISCUSSION

Haematometra should be suspected in a woman with a history of 2^0 amenorrhea with cyclical abdominal pain following a Caesarean delivery [16]. It's a rare complication of a Caesarean section caused by blockage of cervical os leading to pathological collection of menstrual blood in the uterus [6].

It's commonly observed in congenitally malformed uterus such as in cases of imperforate hymen or transverse vaginal septum but can also be acquired. The predisposing factors for haematometra include placenta praevia, placenta accrete and percreta, multiple previous Caesarean sections and previous cervical operative procedures [16] and obstructed labour[15].

Haematometra following a Caesarean section may be due to iatrogenic closure of the internal os or stitching of the anterior and posterior uterine walls, thus creating a uterine pouch where blood may collect [8] as was the case for our patient.

Common symptoms of cervical stenosis include chronic pelvic pain, dysmenorhea, amenorrhea, infertility and endometriosis. Our patient developed haemotometra due to iatrogenic cervical stenosis.

Ultrasound and MRI are two imaging modalities that can be used in the diagnosis of haematometra [12]and ultrasound being the first [8] was used for this patient to cut cost.

With a clear understanding of the patient's anatomy together with the patient's risk factor in developing haematometra; an encompassing treatment plan was formulated. Spinal anaesthesia was used because there may be need for laparotomy from failed cervical dilation [12,14]. This was put into consideration by assessing the size(thickness) of the stenosis with ultrasound scan which was closed with an AP diameter of 1.52cm which was a pointer to success with vaginal route [4,15].

The identiable risk factors in our case included previous Caesarean section with poor surgical technique at a district hospital and this invariably led to secondary amenorrhea. With increasing rates of Caesarean deliveries occurring on a global scale, there is equivalent increase in rarer complications such as haematometra [16]. In order to reduce this complication from becoming more common especially in cases with increased risk such as placenta praevia and prolonged obstructed labour during Caesarean section when attempting to arrest acute blood loss by applying multiple haemostatic sutures which can lead to this complication [9].

We advise that after securing haemostatis (under-running) stitches on the bleeding placenta bed in placenta praevia and the angle of uterine incision which can sometimes extend into the uterines in obstructed labour, a Hegar's dilator

(number 6&8) should be inserted through the internal os of the cervix and discarded before uterine closure of the anterior & posterior walls to prevent accidental closure of the cervix.

CONCLUSION

When performing a Caesarean section for a primigravida with either prolonged obstructed labour or placenta praevia; there is need to be more cautious because of the increased risk of cervical stenosis which can jeopardize her future reproductive career from bilateral hydrosalpinx, endometriosis, secondary infertility and uterine rupture [12] and early treatment may help to prevent severe complications as done in this case.

Secondly, it can also limit her family size because 2nd delivery may end up in Caesarean section from cervical dystocia due to scarring of the cervical os [9].

Thirdly, the economic implication/cost of multiple surgeries and its morbidities and lastly the psychological trauma from obstructed labour and intra-uterine fetal death can be really disturbing. In view of the fact that haematometra is a rare condition with serious complications; It's therefore imperative to make conscious efforts during surgery to prevent it from occurring especially in a primigravida undergoing a Caesarean section by employing the right surgical techniques and hegar's dilators before final uterine closure because the complication can be costly.

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