

Case report of haematometra and cervico-isthmic adhesions following caesarean section in a resource-low setting

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Abstract

Background: Caesarean section is the most commonly performed major abdominal operation in women. Although rare, it can be complicated by cervico – isthmic adhesions and haematometra.

Case summary: We report the case of 24 year old African female gravida 1 para 1 with haematometra following obstruction of outflow tract due to prior caesarean delivery managed by dilatation and evacuation with complete return of normal menses.

Conclusion: Uterine outflow obstruction should be excluded in women presenting with amenorrhoea after caesarean section.

Abbreviations: CS – Caesarean Section

Introduction

Haematometra is a rare condition caused by obstruction of the lower female outflow genital tract resulting in an accumulation of menstrual fluid in the uterine cavity [1]. Although most commonly a result of congenital abnormalities, in older women, the obstruction is usually acquired and occurs at the level of the cervix. Haematometra can be a rare complication of caesarean section [2]. Management is usually by dilatation and evacuation of the haematometra followed by placement of intrauterine catheter for continuous drainage [3]. We present the case of a 24 year old female with haematometra following obstruction of outflow tract due to prior caesarean delivery managed by dilatation and evacuation with complete return of normal menses.

Case presentation

Madam X is a 24 year old African (Cameroonian) female gravida 1 para 1 with an amenorrhoea of 11 months since delivery who presented with cyclical lower abdominal pains of 5 months duration. The pains were cyclical, intermittent occurring every month, crampy in nature and lasting about 4 – 6 days per month. It was associated with progressive abdominal distension but no vomiting and no constipation. The past history reveals that an emergency caesarean section (CS) was done 11 months ago indicated for cephalo-pelvic disproportion. The CS was complicated in the early postoperative period by postpartum endometritis and postpartum peritonitis treated by laparotomy. She admits eating well and denies weight loss. On examination she was clinically pale, vital signs normal. The abdomen was mildly distended with the presence of a mass arising out of the pelvis, tender on

palpation and dull on percussion. On vaginal examination, the cervix was long, firm and closed. Digital bimanual examination revealed a uterus increased in size about that of a 14 weeks pregnancy, right adnexa mass. A Transvaginal ultrasound was done and it showed an intrauterine collection of 76cc of blood (Figure 1). Following the transvaginal ultrasound, re-vaginal examination was done with a uterine sound and the uterine sound could not pass through the cervical os. We concluded on a working diagnosis of haematometra from cervico-isthmic adhesions. Misoprostol 800µg was inserted into the vagina for dilatation and 8 hours later dilatation was done with Hager's dilator with evacuation of 150cc of brown chocolate colour blood (Figure. 2). An intrauterine Foley catheter was left in place for 48 hours for continuous drainage. Her menses resumed and flow monthly for the 3 months period of follow up.

Discussion

Haematometra is accumulation of blood in the uterus due to obstruction of the outflow tract. It may be congenital or acquired [4]. Congenital causes are imperforate hymen and transverse vaginal

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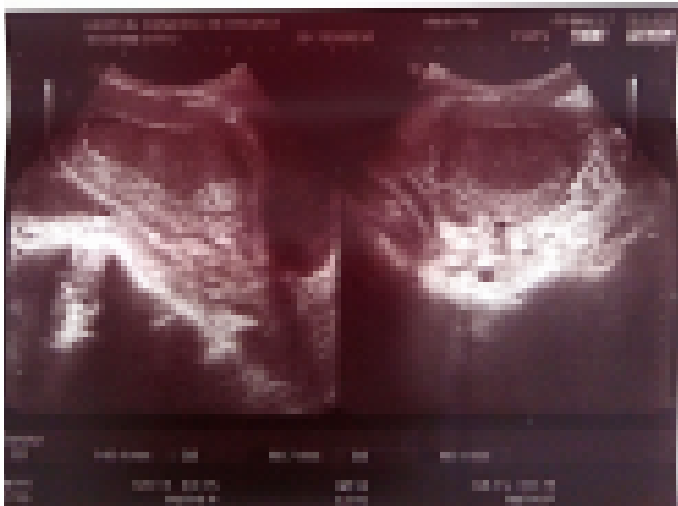
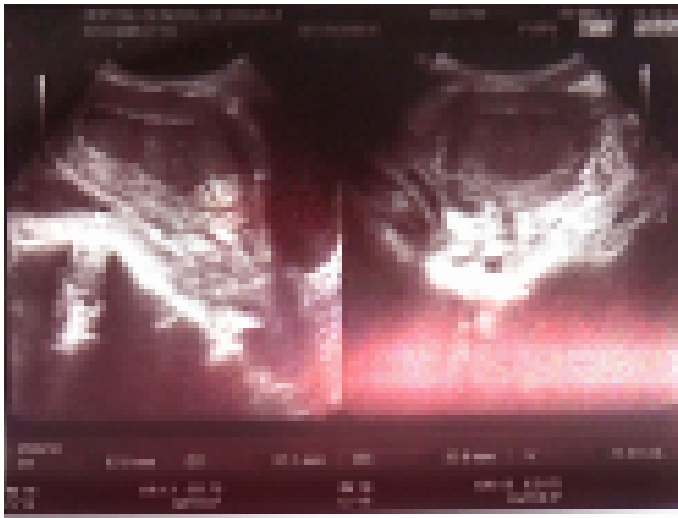


Figure 1. Transvaginal sonography showing intrauterine collection of about 76cc of blood.

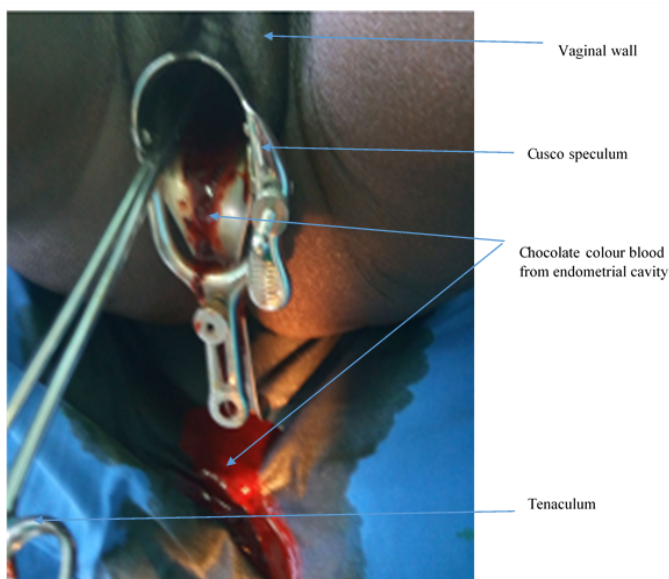


Figure 2. Figure showing chocolate colour blood evacuated after dilatation of the cervix for haematometra.

septum whereas acquired causes may include senile atrophy of endocervical canal, scarring of the isthmus by synechiae, radiation and endocervical malignancy or due to surgical procedures. Various surgical procedures associated with hematometra are dilatation and curettage, cone biopsy, endometrial ablation, cryocoagulation and electrocautery [2]. Although rare, the occurrence of cervico - isthmic adhesions and haematometra can be a complication of caesarean section. Risks factors of cervico-isthmic adhesions may include placenta praevia, placenta accreta, multiple caesarean sections or a scarred uterus and postpartum endometritis, manual removal of the placenta [2,5]. Haematometra in caesarean section could also arise as a result of inappropriate uterine closure due to stitching of anterior and posterior uterine wall creating a uterine pouch where blood could get collected over several years [6]. Risk factors identified in our indexed case included postpartum endometritis, postpartum peritonitis and probably poor surgical technique as the caesarean section was done in a district hospital by a general practitioner.

Transvaginal sonography is most useful in the evaluation of haematometra [7]. In our case transvaginal sonography showed intrauterine collection of 76cc. The goal standard in the management is hysteroscopy followed by insertion of intrauterine Foley catheter [3]. In our patient, misoprostol 800µg was inserted into the vagina for dilatation and 8 hours later dilatation was done with Hager’s dilators with evacuation of the haematometra. An intrauterine Foley catheter was left in place for 48 hours for continuous drainage.

Conclusions

This case is a reminder that genital tract outflow obstruction should always be excluded in women with secondary amenorrhoea.

Declarations

Ethics approval and consent to participate: Ethical approval was obtained from Douala general hospital for publication of this case report.

Consent for publication: Written informed consent was obtained from the patients for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Availability of data and material: The datasets (medical file of the patient) is available in Douala general hospital on reasonable request.

Competing interests

“The authors declare that they have no competing interests” in this section.

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Author’s contributions

All authors participated in the design and editing of the manuscript, all authors approved the final version of the manuscript.

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