

Hematometra Formation- A Rare Complication of Cesarean Delivery

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ABSTRACT

Hematometra resulting from partial or complete obstruction of lower genital tract may be congenital or acquired. Commonest congenital causes are imperforate hymen and transverse vaginal septum. Acquired causes are 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. Hematometra following an abortion or cesarean delivery is rare. We report a case of hematometra following obstruction of outflow tract due to prior cesarean delivery.

Keywords: Cesarean section, Chorioamnionitis, Hematometra, Synechiae

CASE REPORT

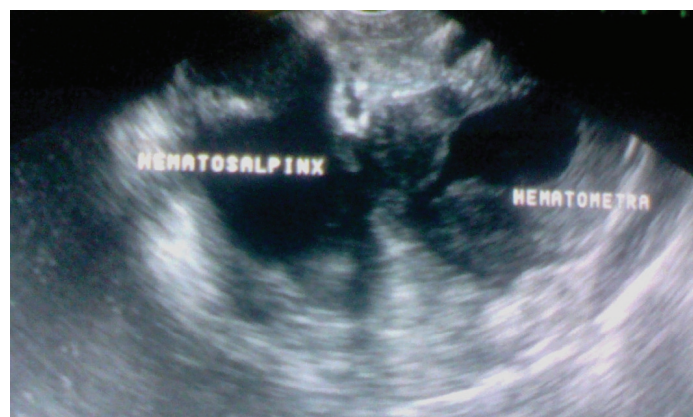
A 30-year-old P₁L₀ presented to outpatient department with complaint of irregular, scanty menses for three years. She had undergone cesarean delivery five years back for non progress of labour in a village. It was a macerated still birth. According to her, postoperative period was uneventful. She resumed menses only for a few cycles followed by amenorrhea, cyclical lower abdominal pain and abdominal distension. Ultrasonography at a private hospital revealed uterine collection. Cervical dilatation and curettage was done at that time and blood clots removed. Following this, she resumed irregular, scanty menses and cyclical lower abdominal pain continued, with which she reported to our hospital. Examination revealed abdominal pfannenstiell scar and suprapubic vague fullness. On per-speculum, cervix and vagina were normal and brownish discharge was present at external os. On bimanual examination, uterus was retroverted, non tender, six weeks gravid uterine size, with restricted mobility. There was a firm transverse ridge just above the internal os. Right fornix had 4cm mass with restricted mobility. Left fornix was thickened. Transvaginal scan revealed hematometra, bilateral hematosalpinx and bilateral endometriomas [Table/Fig-1]. A provisional diagnosis of postcesarean hematometra was made, possibly due to uterine infection leading to adhesions and obstruction of uterine outflow tract. She underwent hysteroscopy along with cervical dilatation. External os and endocervical canal were normal. Flimsy and dense adhesions were present above the internal os and blood collection was seen in uterine cavity. Hysteroscopic adhesiolysis along with cervical dilatation was done and hematometra drained. Foley's catheter was inserted in the uterine cavity for three days and low dose estrogen started postoperatively. Repeat ultrasound at three months follow up revealed normal uterine cavity and patient had resumed normal menstruation.

DISCUSSION

Although rare, the occurrence of intrauterine adhesions and haematometra / pyometra can be a long-term sequel of caesarean section. Literature has isolated case reports of hematometra formation following cesarean delivery. The associated risks factors include placenta praevia, placenta accreta, percreta, chorioamnionitis with prolonged rupture of membranes, multiple caesarean sections or a scarred uterus and postpartum endometritis. Poothavelli et al., reported a case of placenta previa where multiple hemostatic sutures

were taken in noncontractile lower uterine segment after cesarean delivery. Though, effective in controlling postpartum hemorrhage (PPH), it lead to uterine synechiae formation and subsequent hematometra [1]. Manual removal of the placenta can contribute significantly to these complications [2]. Hematometra in cesarean section could be because 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 [3]. Dadhwal et al., reported a case of PPH managed successfully with uterine compression sutures that later presented with hematometra [4]. Women with multiple cesarean deliveries risk the development of uterine synechiae and ventral fixation of uterus to the abdominal wall [5]. Other obstetrical conditions may also be associated with haematometra. It is a rare and delayed complication of medical termination of pregnancy [6].

With the increasing rates of operative delivery, complications are rising. Patients may present from few months to few years. There may be postcesarean isolated hematometra or formation of endometriomas. Transvaginal sonography is most useful in the evaluation [7]. Our case is unique as literature has no case reported of hematometra along with hydrosalpinx and endometrioma formation after cesarean delivery. Hysteroscopic treatment of intrauterine adhesions and drainage of uterine collection is safe and effective treatment in these cases [8]. This patient was treated by hysteroscopic adhesiolysis and resumed normal menses after



[Table/Fig-1]: Ultrasound image showing hematometra along with hematosalpinx and endometrioma

two months. Insertion of intrauterine Foley's catheter following the procedure ensured continuous drainage of collection and also prevented reformation of adhesions.

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