

**Case Report** 

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# Misoprostol is Useful for Post Cesarean Section Management of Redo Syndrome

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## <u>A B S T R A C T</u>

Redo syndrome or acute hematometra is a rare complication after abortion or cesarean section.A-32- year-old woman with previous cesarean section, term pregnancy, and labor pain referred to hospital.She delivered a healthy baby with a good Apgar score and discharge 2 days later without complications after a cesarean section. She came back to the hospital with the severe abdominal pain, weakness, without abnormal bleeding, at 6 days postpartum. Abdominopelvic sonography showed a large hematometra in the uterus. She took misoprostol 200 µg intra vaginal and 200µg sublingual, plus serum oxytocin and cefazolin. After about 1.5 hours, she passed a large hematoma, her pain gradually relieved, and she was discharged three days later. This report show that misoprostol is useful in the management of acute hematometra.

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## Introduction

ailure to pass blood clots following cesarean section is a rare complication. This complication is usually caused by cervical stenosis, an unopened cervix when aminochorionic membranes attached to the lower uterine segment and didn't separate from the uterus, or in a rare condition, a clot may obstruct the cervices. latrogenic cervical trauma in surgical procedures, such as cone biopsy, dilatation and curettage, cryosurgery, post-abortion, and postcesarean section can cause complete or partial cervical stenosis. Risk factors of hematoma after cesarean section included multiple cesarean sections or scarred uterus, chorioamnionitis, postpartum endometritis, and inflammatory process that cause synechiae. Other causes are placenta previa, placenta accrete-percreta and inappropriate closure of uterus that needed hemostatic suture [1].

#### **Case Report**

A 32 -year-old woman G4 L3 was admitted to the hospital, term pregnancy, and previous cesarean section (×3) due to labor pain. She underwent a cesarean section when received a dose of prophylactic antibiotics. She gave birth to a healthy baby with good apgar scores. She took oxytocin for 24 hours after delivery. To prevent maternal thromboembolic events, it was recommended to take low-dose heparin twice daily for 7 days, and she was discharged in good conditions two days after cesarean section. On the sixth day after her cesarean section, she returned to the hospital with abdominal pain and weakness. The patient's appearance was pale and sweaty. In clinical examination, her pulse rate 115 beat /min, and her blood pressure was 95/60 mmHg. In abdominal examination, uterus was large, tender and bulky. In the vaginal examination, the cervical OS was closed and had a brownish and odorless discharge. As soon as possible, IV lines were inserted and 20 units of oxytocin in1000 ml of ringer were given by intravenous drip and continuous every 8 hours for 24 hours.

Her hemoglobin was low and vital signs were unstable, two-pack cells were prescribed. After the patient's stabilization, the ultrasound exam showed a large hematometra in the uterus. She took misoprostol 200  $\mu$ g intra vaginal, 200 $\mu$ g sublingual plus antibiotic. Near 1.5 hours, she passed a large hematoma and pain gradual relief. Repeated sonography was normal, and she was discharged after 3 days.

### Discussion

Acute Hematometra or Redo syndrome may be a

life-threatening condition for the mother if delays in diagnosis and treatment, especially in criminal abortion. Evacuation of blood and clot retained in the uterine cavity will prompt relief of the patient's symptoms. Administration of uterotonic agents after evacuation is essential to prevent recurrent bleeding. Post cesarean section acute hematometra is a very rare event because we passed a forceps ring through the cervix to check for cervical dilatation and administration of uterotonic agents after cesarean section. But it can happen when we have not trained the patient for proper walking and physical activity, especially if we are given low dose heparin and the possibility of thrombocytopenia is present. A recent study by Dawoodet et al. has shown that mechanical cervical dilatation in elective cesarean section decreases febrile morbidity and does not increase infection and endometritis rates [1].

In the year 2010, Saeed GA introduced a 40-yearold patient with huge hematometra, one year after a cesarean section. The patient, who has lost her baby after a cesarean section at birth, has traditionally (for infertility treatment) developed pain and abdominal distension, nausea and vomiting, and anorexia. After an ultrasound and uterine exam, she undergoes hysterectomy at a height of about 30 weeks - with the possibility of malignancy. After surgery, they find an obstruction of the uterine outflow tract. The anterior and posterior walls of the uterus had been sutured in the previous cesarean section and the vagina had been repaired without contact with the uterus [2].

Cervical stenosis and hematometra may develop following vesico-vaginal fistula surgical repair [3].

Gupta's patient suffered hematometra due to obstruction of the uterus after a cesarean section. The reason for this was the deep suturing of the placental Previa bed to control the bleeding [4].

Paul Nkemtendonget et al. presented the diagnosis of hematometra eleven months after cesarean section from cervico-isthmic adhesions caused by postpartum peritonitis [5].

Kharat and Kuumari presented the diagnosis of hematometra 15 years after cesarean section [6].

Kaur et al. presented a case of hematometroma 5 years after a cesarean section. In the hysteroscopic examination of this patient, the presence of synechia and dense adhesions in the uterine cavity, especially the uterine outflow following endometritis, was confirmed after a previous cesarean section [7].



## Conclusion

Misoprostol is useful for post cesarean section management of redo syndrome or hematometra without additional surgery. After a cesarean section, make sure that the patient's cervix is dilated to prevent blood clots from remaining in the uterine cavity, as well as encourage the patient to do proper walking and physical activity.

## **Ethical Considerations**

## **Compliance with ethical guidelines**

There were no ethical considerations to be considered in this article.

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#### **Conflict of Interests**

The authors declare that there is no conflict of interest.

### Author's contributions

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

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## References

- Dawood AS, Eelgergawy A, Eelhalwagy A, Aataallah WM, Eelbohoty SB, Eelshwaikh SL, et al. The impact of mechanical cervical dilatation during elective cesarean section on postpartum scar integrity: A randomized double-blind clinical trial. Int J Womens Health. 2019;11:23-9. https://doi.org/10.2147/IJWH.S188628
- Saeed GA. Case of postoperative haematometra in a 40-yearold woman. East Mediterr Heal J. 2010;16(2):237-9. https:// doi.org/10.26719/2010.16.2.237
- Lilungulu A, Mwibea W, Nassoro M, Gumodoka B. A Case of Haematometra Secondary to Cervical Stenosis after Vesicle Vaginal Fistula Surgical Repair. Case Rep Obstet Gynecol. 2017;2017:1-4. https://doi.org/10.1155/2017/2303840
- Gupta S, Tyagi M, Khanuja E, Prakash D. Hematometra following caesarean section for placenta previa. S Afr J Obstet Gynaecol. 2017;23(3):76-7. https://doi.org/10.7196/sajog.1148
- Paul Nkemtendong Tolefac, Nana Njamen Theophile, Charlotte Nguefack Tchente, Eugene Yeika, Bongoe Adamo and Eugene Belley Priso. Case report of haematometra and cervico-isthmic adhesions following caesarean section in a resource-low settingClinical Research and Trials 2017; 3(5): 1-3. https://doi. org/10.24087/IAM.2017.1.10.308
- Kharat A, Kumari S. Cervical Stenosis: A Rare Complication of Cesarean Section. 2014;24(11).
- Kaur G, Jain S, Sharma A, Vaid NB. Hematometra formation- A rare complication of cesarean delivery. J Clin Diagnostic Res. 2014;8(8):4-5. https://doi.org/10.7860/jcdr/2014/8364.4689