

POSTPARTUM PYOMETRA DRAINAGE : A SURGICAL DILEMMA

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ABSTRACT

We present a case of 25 year old female who delivered by a normal vaginal delivery with ppiucd insertion who presented on Day 12 of postpartum with pyometra . She was managed conservatively along with drainage of pyometra being done by Tablet Misoprostol.

KEYWORDS : ppiucd, postpartum , pyometra , drainage , Misoprostol

INTRODUCTION

Postpartum endometritis (PPE) is the most common infectious complication in women following child birth¹. Incidence of postpartum fever and endometritis varies from 3% to 4%² to as much as 16.5%³ of puerperium. Cesarean section continues to be the leading predisposing factor; however, duration of labor, rupture of membranes, and internal fetal monitoring are considered by some to be additional precipitating factors of PPE^{1,3}. Antibiotic treatment results in clinical cure in 85% of PPE cases and in 90% with postoperative infections, including infections after cesarean section⁴. Despite this success, more serious sequelae of PPE include septic pelvic thrombophlebitis, wound infection with dehiscence, and pelvic abscess.¹

Pyometra, a collection of pus in the uterine cavity, is rare, with a reported incidence of 0.5% in gynecologic patients, including those with cancer⁵. The etiology of pyometra is varied, as it is associated with any condition causing cervical occlusion. The most common cause is malignancy of the uterus and true pelvis; other causes include benign tumors of the pelvis (leiomyomata, polyps), traumatic operations on the cervix (conization), radiation cervicitis, atrophic cervicitis, congenital anomalies and puerperal infections^{6,7}. The typical symptoms of pyometra include uterine enlargement, cramping, vaginal discharge, acute abdominal pain, and postmenopausal bleeding.⁸ Spontaneous rupture of a pyometra is an uncommon complication.^{8,9}

Diagnosis of pyometra has been facilitated by use of ultrasonography. Since the postpartum uterus is extremely prone to perforation therefore surgical drainage was not preferred for such patient , instead, a 200 ug Tablet Misoprostol was given following which a transvaginal ultrasonography was done and reduced volume of pus collection was noted .

CASE DISCUSSION

A 25 -old woman, gravida 4, para 3, gave birth spontaneously at term without anesthesia to a 3000g male infant with Apgar scores of 10. Her labor lasted 9 hours, and her membranes had been ruptured for only 3 hours before delivery. The third stage of labor was complicated by retained placenta, which was removed manually and with curettage following which Ppiucd insertion was done . She went home afebrile with her infant on the 2nd postpartum day.

She presented to emergency department on day 12 of her delivery with complaints of pus discharge per vaginum associated with pain abdomen . On general physical examination of the pateint , she was found to have raised pulse (110/min) and patient was afebrile (98.1 F).

No signs was acute abdomen were seen .On per speculum examination ,profuse purulent foul smelling pus discharge

was seen draining from inside internal os , with healthy cervical and vagina mucosa. The endocervical pus sample was collected and sent for pus culture . On per vaginum examination , uterus was found to be 14 weeks size, soft in consistency ,anteverted ,with no forniceal tenderness bilaterally.

Her leukocyte count was found to be 18,200/mm³ with segmented neutrophil 86%.

On ultrasonography , a hypo echoic shadow of approximately 49 cc distending the uterine cavity was seen associated with a heterogenous mass see in the fundal part of the uterus of size 12 cc.(as seen in Fig 1). An IUCD was also seen lying the lower segment of the uterine cavity .



FIG 1 : Transvaginal ultrasound showing hypoechoic shadow distending the uterine cavity along with retained placental tissue in the fundal region . A IUCD. Was also seen lying in the lower segment of the uterine cavity .

After 48 hours of broad spectrum antibiotics coverage , following which her leukocyte count fell down to 12,300/mm³ . Blood and urine culture were done and were found to be sterile . The pus culture obtained at the time of admission showed growth of group B streptococcus . Patient was planned for pyometra drainage after 48 hours of antibiotics coverage. Tab Misoprostol 200ug pervaginum was given vaginum and thereafter soakage of pad was reported the next day by the patient. A repeat ultrasound was done a reduced volume of collection was reported (20cc). The patient was kept on intravenous antibiotics for 7 days based on culture sensitivity report . Repeated weekly ultrasonography showed diminishing volume of placental tissue with negligible amount of intrauterine fluid . The patient was discharged after 3 weeks in healthy state with no complaints. A ppiucd extraction was done at 6 weeks postpartum as demanded by the patient .

DISCUSSION

The sonographic hallmark of an empty uterus is a bright endometrial stripe, a result of the echo from the opposed anterior and posterior uterine walls. Sonolucent accumulations and echogenic material in the uterus thicker than 5 mm are highly predictive of retained products of conception after first trimester pregnancy loss.¹⁰ Small endometrial fluid accumulations in the uterus postpartum are not associated with maternal morbidity, but an echogenic mass indicates

retained products of conception.11

This patient was predisposed to endometritis because her uterus was explored and instruments were used to retrieve the retained placenta, following which a further 10 cc retained placental tissue was left inside. Curettage may have predisposed her to cervical canal obstruction along with occlusion by the placenta lying in the lower segment of uterine cavity. There was spontaneous drainage at the time she presented with endometritis, however, and the cervix appeared to be open.

Early diagnosis is extremely important in pyometra as the sterile pus may get infected and lead to serious complications such as puerperal sepsis, spontaneous perforation.

The prognosis depends upon the underlying cause (e.g. malignancy) and whether there was a spontaneous perforation or not.

Pyometra in the postpartum period is an extremely rare condition. Hence we have to be more vigilant especially in high risk women with adherent placenta, history of IVE, thin endometrium, cervical stenosis, cervical Ectocervix, hemostatic compression sutures (B lynch etc), prolonged rupture of membrane, use of instrumentation during delivery. Retained placental tissue etc. Early diagnosis and management will prevent future grave complications like puerperal sepsis, perforation and acute abdomen and hence prevent maternal morbidity and mortality. 12

The standard management in case of pyometra is drainage of the pus, but in this case the patient was just 12 days post delivery, the uterus was extremely prone to perforation. After explaining the patient and her husband, trial of conservative therapy was decided via the use of antibiotics and tab Misoprostol.

CONCLUSION

PYOMETRA drainage is a surgically challenging procedure in postnatal patient since the uterus is prone to perforation in the postpartum period. There is high risk as serial passage of cervical dilators alone can lead to false passage creation.

Therefore a pervaginum Misoprostol was given to decrease the requirement of instrumentation. Serial ultrasonography done ensured diminishing placental tissue size with negligible fluid collection.

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