

Uterine Scar Dehiscence Rare Cause of Secondary Postpartum Hemorrhage – A Case Report

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Abstract

Secondary postpartum hemorrhage is defined as vaginal bleeding from 24 hours after delivery to 6 weeks postpartum, rarely caused by uterine dehiscence. A 25-year-old lady, parity 2, live 2, abortion 1, with previous two cesarean section presented on postoperative day 42 with heavy bleeding per vaginum and pain abdomen since one day. The patient had history of PPH for which medical management and evacuation was done within ten days of surgery. On examination, patient was anemic, 50 cc clots removed per vaginum. Ultrasound showed RPOCs-; evacuation was done under antibiotic cover. Beta hCG and ultrasound Doppler were obtained to rule out gestational trophoblastic tumor and AV malformation respectively. Injection methotrexate was given when patient continued to have bleeding per vaginum on and off. On postoperative day 52, patient developed heavy bleeding, that did not respond to medical management. The patient was taken for emergency hysterectomy after consent was given. Per-operatively, bladder was found adherent to scar as well as scar dehiscence. Tissue around scar was found necrotic. Total abdominal hysterectomy was performed. The patient was discharged on day four in stable condition. Aim of this case study is to emphasize the-; diagnosis of uterine scar dehiscence as a cause of secondary PPH that requires a high index of suspicion in patients who are not responding to medical or surgical management;- with infection and anemia.

Keywords

Secondary postpartum hemorrhage; abdominal hysterectomy ; uterine dehiscence.

I. Introduction

Postpartum hemorrhage is major cause of maternal morbidity and mortality. Secondary postpartum hemorrhage is defined as vaginal bleeding from 24 hours after delivery to 6 weeks postpartum. It could be because of retained placental tissue, infections, choriocarcinoma, AV malformation, coagulopathy, and rarely scar dehiscence. The frequency of uterine dehiscence is between 0.06% and 3.8% [1]. Laparotomy is recommended if uterine dehiscence is associated with infection or intractable hemorrhage. Hysterectomy is recommended in cases of the infected line of incisions such as in presence of endomyometritis and abscess. A case of secondary postpartum hemorrhage due to delayed uterine scar dehiscence presenting with intractable vaginal bleeding is reported to give insight to this rare entity.

II. Material and Methods

A 25-year-old lady, parity 2, live 2, abortion 1 with previous two cesarean section presented on postoperative day 42 with heavy bleeding per vaginum associated with pain abdomen since one day. She underwent Elective LSCS on 28th December 2018 at Swami Dayanand hospital in obstetrics and gynecology department because of previous cesarean section. She received routine antibiotics. Postoperatively there was history of on and off bleeding per vaginum, which was medically managed. She was then taken to a private nursing home for the same complaints, where she was managed medically, failing which, dilatation and evacuation were done within ten days of surgery. The patient continued to have bleeding episodes on and off; she had heavy bleeding one day prior hence she was brought to our casualty.

At the time of presentation, there was no history of fever. Her vitals were stable, but pallor was present. On examination, the abdomen was soft and non-tender. On per speculum examination, 50cc clots were removed, and high vaginal swab was obtained. On per vaginal examination os was closed, and uterus was found to be bulky. Ultrasound was suggestive of a hyperechoic area of size 2x2

cm in fundal region, likely retained placental bits. Routine blood investigations were done which showed severe anemia for which she received three packed cells and three FFP. TLC was normal. Beta hCG has done, which was 3.8mIU/ml, ruling out gestational trophoblastic disease. The patient underwent Suction Evacuation on postoperative day 46 under antibiotic cover as per high vaginal swab report was suggestive of E.Coli infection. Intraoperatively she received uterotonics because of heavy bleeding during the procedure. A large amount of tissue was obtained which was sent for histopathology and culture. Injectable antibiotics were continued. However, she continued to have occasional bleeding per vagina. Repeat ultrasound showed 1x1 cm retained products of conception at the fundal region, and AV malformation was ruled out on Doppler ultrasound. Injection methotrexate 50mg was on postoperative day 49.

On a postoperative day 52, the patient suddenly developed heavy bleeding for which uterotonics were given; however, there was no improvement. The patient became hemodynamically unstable; hence she was taken up for emergency hysterectomy after arranging adequate blood and taking consent. Per-operative findings showed bladder adherent to previous scar. On separation of bladder, previous uterine scar dehiscence of 3cm was noted along with adherent clots at the scar site. Total Abdominal Hysterectomy was done as scar appeared to be unhealthy and necrotic (Figure1,2). Multiple blood transfusions were done. Postoperatively period was uneventful. The patient was discharged on day four in a stable condition. Stitch removal was done on day 10.

III. Discussion

Uterine dehiscence in the postpartum period is a rare entity. Risk factors include diabetes, emergency surgery, infection, suture technique, hematoma of uterine incision line, and incision placed too low in the lower uterine segment [1]. In this case, patient presented with repeated episodes of painless heavy bleeding per vagina on postoperative day 42 and history of dilatation and evacuation within 10 days of surgery. Previously few cases have been reported in which the patient presented on 7th and 28th postoperative day with complaints of painless, heavy and recurrent vaginal bleeding [2,3], however, Wagner et.-al., reported a case in which patient came on 43rd postpartum day with vaginal bleeding.

Causes of secondary PPH include retained placental bits, endometritis, uterine subinvolution, AV malformation, gestational trophoblastic disease and rarely uterine dehiscence. In this case, the ultrasound showed retained placental bits on two separate occasions, confirming it to be the cause of secondary PPH. Simultaneously, AV malformation and gestational trophoblastic disease were ruled out with the help of ultrasound Doppler and beta hCG, respectively.

Infection associated with uterine scar dehiscence may present with fever, tachycardia, abdominal tenderness, features of anemia, and sepsis [4]. In our case, the vaginal swab and tissue culture were suggestive of infection with E.Coli and acinetobacter respectively, however, clinical

signs of infection were absent. The patient also had severe anemia leading to multiple blood transfusions. These together could be attributing factors for uterine scar dehiscence in our case.

In cases of intractable vaginal bleeding that is not responding to medical and surgical (dilatation & evacuation) management, exploratory laparotomy should be the treatment of choice (4). On exploratory laparotomy resuturing after debridement may be considered if a uterine scar appears healthy. Hysterectomy is preferred if the scar margins are infected and necrotic or in the presence of marked endomyometritis [4,5]. In such scenarios the lower uterine segment scar should be assessed by MRI [2], but their clinical implication in an acute condition is questionable. Angiography can also be considered to find out the source of bleeding. As uterine scar dehiscence was not suspected in the present case-; therefore, the investigations were not performed.

IV. Conclusion

The diagnosis of uterine scar dehiscence as a cause of secondary PPH requires a high index of suspicion in patients who are not responding to medical or surgical management with infection and anemia. Exploratory laparotomy should not be delayed in suspicious cases to reduce associated morbidity and mortality.

VI. References

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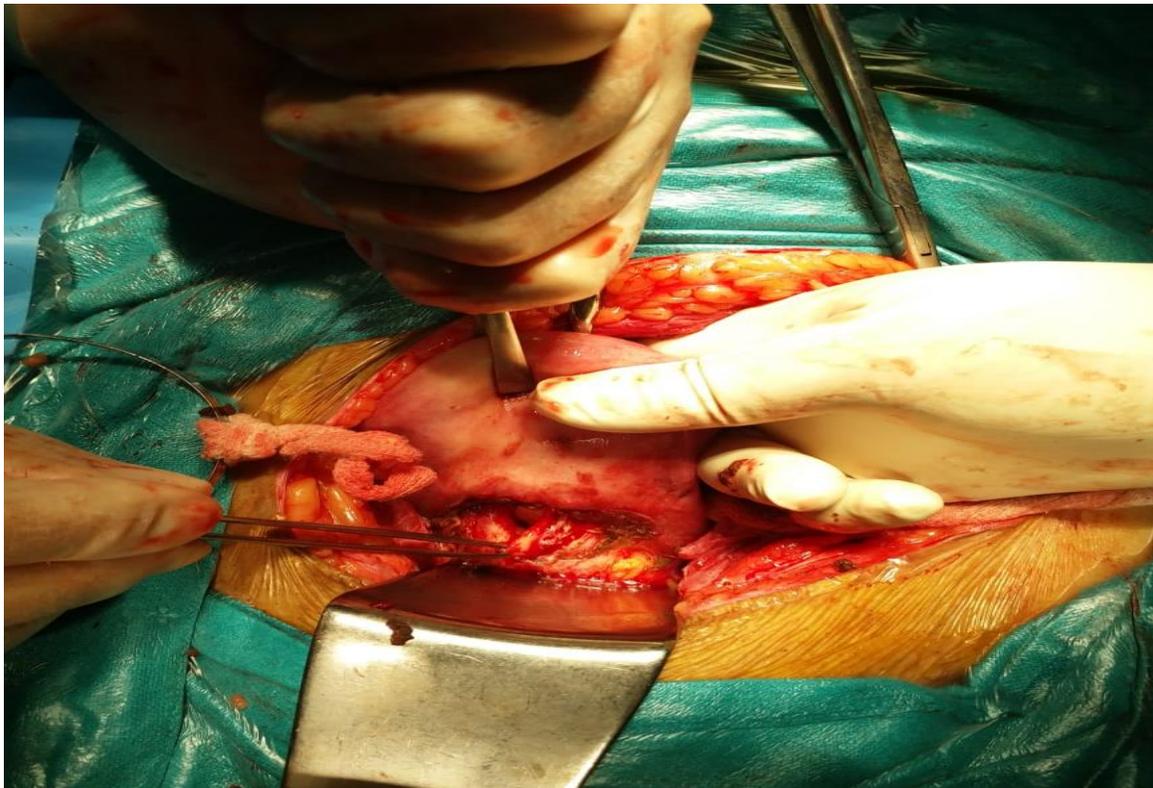


Figure 1 showing scar dehiscence intraoperatively

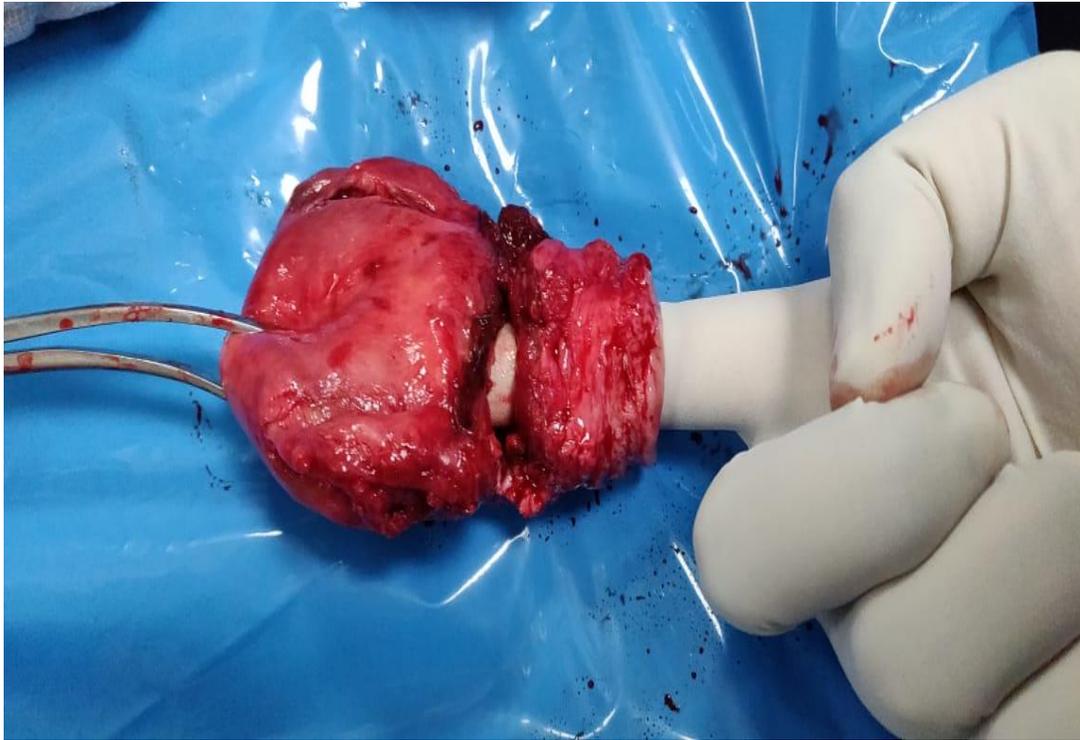


Figure 2 clearly showing necrotic scar tissue