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UTEROCUTANEOUS FISTULA: A RARE COMPLICATION OF B- LYNCH SUTURE

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Abstract:

B-Lynch suture is a compression suture used to give mechanical compression on the atonic uterus, which results in postpartum hemorrhage. B-Lynch suture helps in avoiding hysterectomy and preserve the fertility of patient. These compression sutures have few complications as well like necrosis of uterine wall, pyometra and septicemia. Here we are reporting a case of placenta previa, who underwent emergency LSCS. During LSCS, she had postpartum hemorrhage that is why B-Lynch suture was applied on uterus to control the postpartum hemorrhage. After three months of surgery, patient presented with nodule discharging pus on stitch line. After all the investigations, patient was diagnosed to have uterocutaneous fistula and managed by surgery.

***Keyword**: Postpartum hemorrhage, B-Lynch suture, Fistulography*

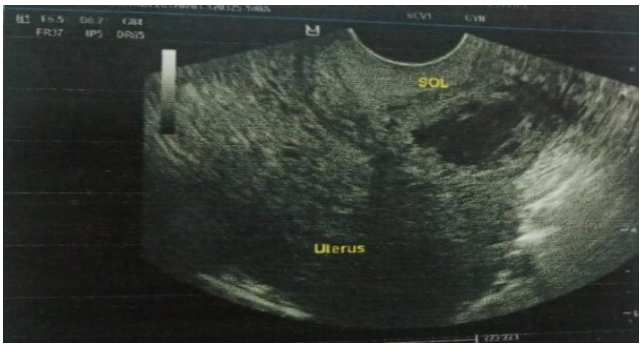
Introduction

Postpartum hemorrhage is the most common cause of maternal morbidity and mortality. Uterine atony is leading cause of postpartum hemorrhage accounting for 75-90% of cases.[1] For atonic uterus, we have medical management like oxytocin, ergometrine, carboprost etc. When medical management fails, surgical management comes in account like bilateral uterine artery ligation, internal iliac artery ligation and finally hysterectomy. B-Lynch sutures (Brace suture) are compression sutures applied on uterus for the management of postpartum hemorrhage when medical management fails.[2] Applying B-lynch sutures preserves the reproductive capacity of patient and reduces the risk of psychological impact and risk of surgical morbidity. There are few complications reported related to application of B-Lynch sutures like ischemia and necrosis of uterine wall, peritonitis and septicemia. Here we are reporting a case of complication of B-Lynch suture, which developed after one year and nine months after lower segment caesarean section.

Case Report

A 33 years old female, P2002 with previous one lower segment cesarean section (LSCS) presented in gynecology OPD with complaint of pus discharge from previous transverse scar for last one year and nine months. Patient had history of emergency LSCS two years back for placenta Previa in tertiary care hospital. During LSCS, patient had atonic postpartum hemorrhage did not respond to medical management. Therefore, B-Lynch sutures (surgical management) was applied using suture vicryl no.1 with bilateral uterine artery ligation. In post-operative period, patient was kept on IV antibiotics, received one-unit blood transfusion. After three months of LSCS, she noticed a painful nodule on right side of stitch line with the discharge coming out through nodule. She took medical treatment for it but did not get relief. With same complaints, she presented us. On examination, she had 0.5 cm size two opening at scar site with pus coming out. On per speculum examination, cervix & vagina appeared normal looking and no discharge seen. On per vaginum examination there was bulky uterus with bilateral forniceal tenderness. Patient was investigated for tuberculosis (TB). Pus was sent for culture & sensitivity and TB PCR, which came out positive. Patient was diagnosed with abdominal TB and received category one antitubercular therapy (ATT) for six months. Patient was asymptomatic for one month after completion ATT then she developed same complaint of pus discharging from scar site.

Patient was investigated with Trans abdominal Ultrasonography showed two sinus tracts on the right side of stitch line ending up in sub pubic abscess and bilateral poly cystic ovaries.



MRI pelvis revealed exophytic collection in anterior wall of lower uterine segment of uterus and cervix? Abscess. Very thin myometrium seen intervening the collection and endometrium. A sinus tract seen extending from right lateral aspect of collection to cutaneous level, coursing along the lateral aspect of urinary bladder. CT Sinogram of ventral abdominal wall done showed complex sinus tract with subcutaneous abscess and induration, extending up to the lower segment of uterus and cervix. Patient was planned for laparotomy. The incision was given on previous scar, abdomen opened in layers after identifying the fistulous tract. The tract was excised up to the uterus. The uterus was bulky, bilateral tubes were normal with bilateral multi cystic ovaries. On lower segment of uterus, necrotic tissue seen (5 cm), pus was draining from the necrotic part of uterus. Bladder was high up, morbidly adherent to the lower segment of uterus. Adhesiolysis done to separate the posterior wall of bladder from lower segment of the uterus. During separation, dome of the bladder opened up. Due to the necrosed lower uterine segment, the decision of Total abdominal hysterectomy was taken. Therefore, we proceeded with Total abdominal hysterectomy with bladder repair with supra pubic catheter (SPC) in situ. In post-operative period, patient was kept on IV antibiotics; SPC was removed on day 10 post-operative. Patient had uneventful recovery. Her histopathology examination revealed proliferative endometrium with acute on chronic inflammation of uterus and cervix.

Discussion

Postpartum hemorrhage has a significant role in maternal morbidity and mortality. Atonic uterus is a leading cause of postpartum uterus. B-Lynch suture has an important role in the postpartum hemorrhage, as it is lifesaving technique and preserves the future fertility. B-Lynch sutures technique is simple and easy. It is a compression sutures applied on uterus which compresses the uterine vascular sinuses and reduces the pelvic arterial pulse pressure.[3,4] An application of B-Lynch sutures control the postpartum hemorrhage, does not require pelvic surgery and preserves the future fertility of the patient.[5] It is also considered as effective surgical approach for controlling atonic PPH with preserving the anatomical integrity of the uterus.[6] But there are some complications related to application of B-Lynch suture like necrosis of uterine wall, pyometra, hematometra, peritonitis and sepsis.[7] It has been seen that risk of complications more with non-absorbable sutures then mono filament sutures. In our patient, there was necrosis of anterior wall of uterus following application of non-absorbable suture which resulted in very rare condition ‘uterocutaneous fistula'. As per literature available, uterocutaneous fistula is developed after septic abortion, migrated intrauterine device, uterovaginal malformation.[8] Fistulography and MRI/CT Scan have an important role in diagnosing uterocutaneous fistula. As this is the rare complication, there is no standard protocol for management of uterocutaneous fistula. In literature, surgical removal of the sinus tract is recommended.[9] But in our case, lower segment of uterus was necrosed, approximation was not possible. That is why decision of hysterectomy was taken.

Conclusion

B-Lynch suture has an important role in managing atonic postpartum hemorrhage. B-Lynch suture decreases the maternal morbidity and mortality with preserving fertility of the patient. But it has a risk of developing uterocutaneous fistula as a rare complication.

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