

A Rare Case of Nocturnal Urinary Incontinence and Menouria after Lower Segment Cesarean Section

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ABSTRACT

Misgav Ladach technique for lower segment cesarean section (LSCS) is considered advantageous universally but debate still continues about nonclosure in layers and further consequences, hence careful selection of cases and intraoperative decision of closure in layers is important if needed. The classical Youssef syndrome comprises of cyclic hematuria, amenorrhea, menouria, and complete urinary continence in a patient who had LSCS. Here by, we are presenting a case report of woman suffered with chronic pelvic pain, menouria, nocturnal enuresis after her LSCS done for obstructed labor, although not exactly same as Youssef syndrome but rare in occurrence and relieved after adhesiolysis and gonadotropin release hormone (GnRH) analog therapy.

Keywords: Menouria, Nocturnal enuresis, Obstructed labor.

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INTRODUCTION

Lower segment cesarean section (LSCS) by Misgav Ladach technique is the most frequently performed surgery by obstetricians today.¹ Incidences of postoperative adhesions formation and urinary bladder endometriosis depend on individual immune response of patient and to a some extent on skill of operator and careful selection of patients. Recently peritoneal closure in two layers is documented by some studies to have lesser adhesion formation.^{2,3}

Due to its fast and minimalist approach, it has been adopted by obstetricians worldwide but sometimes dense adhesions are presented as a complication afterward.⁴ We are reporting one such case of overflow incontinence and menouria due to dense adhesions and bladder wall endometriosis following primary LSCS.

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CASE REPORT

A 23 years old, P1L1, was admitted with chronic pelvic pain, nocturnal bed wetting and cyclic hematuria during periods following her last cesarean section, performed 2 years earlier in view of prolonged second stage of labor. In day time she had frequency of urine but denied of any kind of incontinence. She was kept catheterized for 45 days postoperatively due to hematuria at the time of LSCS. She noticed menouria too, when she resumed her cycles after the LSCS. Her menstrual flow through the genital tract was average in volume.

Her general and systemic examination findings were normal. She had a transverse cesarean scar. Pelvic examination revealed a normal sized anteverted uterus with restricted mobility and induration felt through fornices. Ultrasonography (USG) revealed normal size uterus and normal urinary bladder and adnexae. Diagnostic hysterolaparoscopy with cystoscopy was planned. On cystoscopy, a small depression in posterior bladder wall was seen covered with clots, methylene blue was instilled through cervix to see any spillage from bladder wall but it was negative. From suspicious tissue, biopsy was sent for histopathological examination. On laparoscopy anterior surface of uterus was seen completely adherent to anterior abdominal wall and only upper surface of uterus was visualized surrounded by adhesions all over (Fig. 1).

To rule out any vesicouterine fistula and dissecting uterus, urinary bladder from anterior abdominal wall to make them free, laparotomy was done in same sitting. On laparotomy, after some adhesiolysis uterus was appeared sitting over the urinary bladder and densely fixed to anterior abdominal wall (Fig. 2). Even after complete separation of uterus and urinary bladder no fistulous track was observed in between, may be there was initial injury during primary LSCS which was healed up leaving behind some endometrial tissue in the bladder wall. Omental pad was kept in between uterus and urinary bladder. Postoperative period was uneventful. Biopsy from urinary bladder confirmed endometrial glands. She was discharged on injection Leuprolide 1.25 mg for 3 months.

Her urinary incontinence was totally resolved and when the patient resumed her cycles there was no menouria.

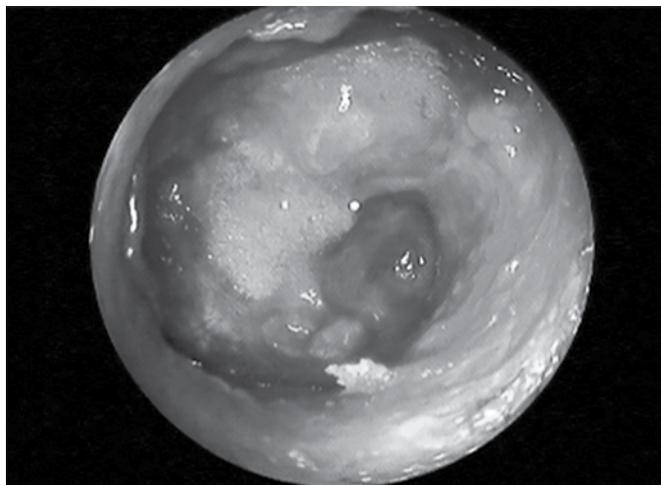


Fig. 1: Laparoscopy picture showing only upper surface of uterus was visualized surrounded all over by adhesions

DISCUSSION

Adhesion formation after cesarean section varies widely in incidence. Etiopathology of it is poorly understood. It is again debatable, whether peritoneal closure is beneficial or not.²⁻⁴ Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity.^{5,6} Endometriosis of the urinary bladder is an uncommon lesion and is seen in 1% of all cases of endometriosis.⁷ It exists in two forms, primary and secondary. The primary form is generally a part of generalized pelvic disease, whereas the secondary is iatrogenic, that is, it occurs after pelvic surgery like cesarean section or hysterectomy.⁷ In this case, it might had developed following prolonged second stage of labor or due to intraoperative trauma leading to Vesicouterine fistula, which was healed afterwards. Vesicouterine fistula is an uncommon urogenital fistula and accounts for 1 to 4% of all urogenital fistulas.⁸ Cyclical hematuria or menouria is an important clinical feature of this fistula which may or may not be associated with urinary incontinence depending on the location of the fistulous tract.⁶ The classical Youssef syndrome comprises of cyclic hematuria, amenorrhea, menouria, and complete urinary continence in a patient who had LSCS.⁹ This is explained by the differential pressure gradient between the uterus and the bladder and the sphincteric action of the isthmus, which facilitates passage of blood from the uterus into the bladder.⁹ Our case is not a classical Youssef's syndrome as the patient had incontinence. Dense adhesions between the anterior abdominal wall, uterus and bladder were noted on laparoscopy and confirmed on laparotomy. The anchoring effect of the uterus on bladder explains the overflow incontinence experienced by the patient. Total separation of uterus, urinary bladder and anterior

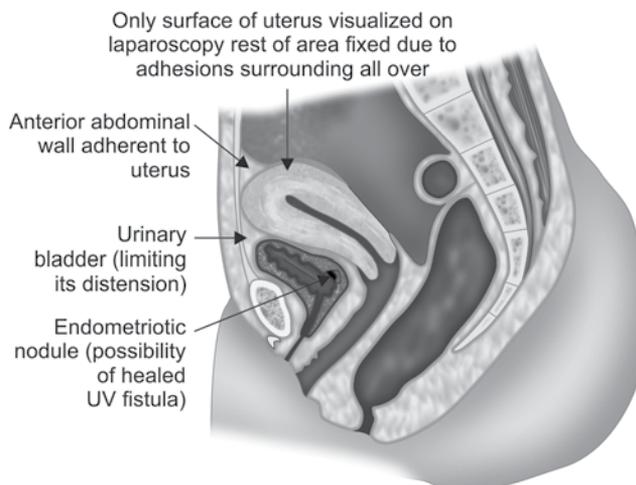


Fig. 2: Laparotomy picture, i.e. uterus adherent all around limiting distension of urinary bladder. Endometriotic nodule visualized on cystoscopy

abdominal wall by laparotomy relieved the urinary incontinence of the patient. The diagnosis of vesicouterine fistula (VUF) is often confirmed by imaging studies and cystoscopy.^{7,9} Vesicouterine fistula following cesarean section may heal spontaneously with involution of the puerperal uterus. Spontaneous healing may occur in 5% of cases. When it does not, continuous hormonal therapy can be given to suppress menstruation for 3 to 6 months as first line of therapy. Suppression of menstruation can be tried with progestogens or GnRH analog⁶ as is done in this case. The histopathology confirmed endometriosis of bladder wall.

CONCLUSION

Injuries to the bladder discovered at the time of cesarean section should be repaired immediately. If the diagnosis of a vesicouterine fistula is made in the early postoperative period, there have been a few reported cases of spontaneous closure of fistula with continuous urethral catheter drainage for 2 weeks with antibiotic cover.⁸ Diagnosis of such cases are difficult due to nonspecific symptoms. High index of suspicion to all symptomatic women with a history of cesarean delivery or other gynecological surgery give a clue to the diagnosis.

Ultrasonography may be inconclusive. Cystoscopy and biopsy may give a clue to the diagnosis before surgery.⁹ Treatment varies according to the severity and site of involvement of each case. Hormonal therapy does have a definite role in regressing the lesion.⁶

Although Misgav Ladach technique is advantageous in general for LSCS, care should be taken for proper selection of cases. Specially in cases of obstructed labor where bladder wall integrity is unpredictable, layerwise opening and closure is important to prevent postoperative complications.

REFERENCES

1. Shetty A, Fonseca M, Rao S, Badhwar VR. The Misgav Ladach Lower Segment Caesarean Section Experience at a Tertiary Hospital, Bombay Hospital Journal. Available at: www.bhj.org/journal/2003_4502_april/themisgav_294.htm.
2. Lyell, Deirdre J, Caughey, Aaron B, Hu, Emily, Daniels. Kay peritoneal closure at primary cesarean delivery and adhesions. *Obstet Gynecol* 2005 Aug;106(2):275-280.
3. Tulandi T, Al-Sunaidi M. Averting adhesions: surgical techniques and tools. Peritoneal closure at C-section reduces the risk of adhesions. *J Family Practice* 2007 Sep; 19(9):9.
4. Shi Z, Ma L, Yang Y, Wang H, Schreiber A, Li X, Tai S, Zhao X, Teng J, Zhang L, et al. Adhesion formation after previous caesarean section—a meta-analysis and systematic review. *BJOG* 2011 Mar;118(4):410-422.
5. Khetan N, Torkington J, Watkint A, Jamison MH, Humphreys WV. Endometriosis: presentation to general surgeons. *Ann R Coll Surg Eng* 1999;81(4):255-259.
6. Agarwal N, Kriplani A, Parul, Nabi G, Hemal AK, Karak AK. Intramural bladder endometriosis after cesarean section: diagnostic and Therapeutic Aspects. *J Gynecol Surg* 2002 Jun;18(2): 69-73.
7. Gupta S, Shah S, Motashaw ND, Shah N, Darshana V, Dave V. Case report: bladder wall endometrioma. *Ind J Radiol Imaging* 2001;11(1):23-24.
8. Abu J, Wong MYC, Foo KT, Yu SL. A case report on vesico-uterine fistula: a very rare complication of the lower caesarean section. *Singapore Med J* 2000;41(11):554-556.
9. Shanmugasundaram R, Gopalakrishnan G, Kekre NS. Youssef's syndrome: is there a better way to diagnose? *Indian J Urol* 2008 Apr-Jun;24(2):269-270.