

Case Report

Postcoital Vaginal Vault Dehiscence 4 Months Post-Total Laparoscopic Hysterectomy

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Abstract

Background: As progress continues to be made in the movement from open abdominal procedures to minimally invasive options, total laparoscopic hysterectomy has continued to retain a preeminent position in the armamentarium of the practicing gynecologist.

Case report: A 32 year old multiparous lady with persistent menstrual disorder and chronic pelvic pain despite conservative management, who underwent an uneventful total laparoscopic hysterectomy with a demonstrable healed vaginal vault on pelvic examination at 6 weeks and 3 months post surgery but later developed a 3cm rupture of the vaginal cuff on her first coital attempt 4months post-operation, which was repaired without complication using a delayed absorbable suture material.

Conclusion: Despite the appearance of a well-healed vaginal vault, the possibility of rupture at first and subsequent coitus after a total laparoscopic hysterectomy should always be discussed pre-operatively.

Background

Vaginal cuff dehiscence, which refers to separation of the vaginal incision after hysterectomy is a rare but potentially morbid complication occurring generally in about 0.24 to 0.31 percent of hysterectomy cases [1,2].

The rates are known to be higher post laparoscopic hysterectomy with reports as high as 0.64 to 0.75% compared to 0.15-0.26% after abdominal and 0.08-0.25% after vaginal hysterectomy [3,4].

Laparoscopic closure of the cuff is associated with a twice higher incidence of cuff dehiscence compared to vaginal cuff closure (0.64% v. 0.30%) [5].

Robot assisted total laparoscopic hysterectomy is associated with vaginal cuff dehiscence between 1.5 and 4.12% [6,7].

Case Presentation

A 32-year-old multiparous lady was brought in by EMS to the ER with sudden onset of pelvic pain and a gush of fluid while having sexual intercourse. She was 4months post an uncomplicated total laparoscopic hysterectomy done for chronic pelvic pain and persistent menstrual disorder with minimal use of an energy device.

Prior to resumption of coitus, her gynecologist had evaluated her at 6weeks and 3months post surgery with a demonstrably healed vaginal cuff on pelvic examination.

On examination at the ER, she was noted to be in painful distress, a febrile with essentially normal vital signs.

Abdominal examination revealed some lower quadrant tenderness, no rebound tenderness with positive bowel sounds.

On pelvic examination, sero-sanguineous vaginal discharge was noted with about 3cm rupture of the vaginal cuff and visible bowel at the cuff.

CT scan confirmed some air in the abdomen but no other significant abnormality.

She was counseled on findings and commenced on broad-spectrum IV antibiotics and hydration. Vaginal vault was packed and informed consent was obtained for closure of the vaginal cuff dehiscence.

Excision of necrotic tissue was done under sterile condition with the scalpel and the vaginal cuff successfully repaired transvaginally with interrupted PDS suture.

She was discharged home after completing 24 hours of broad-spectrum IV antibiotics and advised to delay resumption of vaginal intercourse for 3 months.

She was seen and had an uneventful pelvic examination at 1, 6 and 12 weeks post repair.

Discussion

Generally, vaginal cuff dehiscence are usually associated with risk factors for poor wound healing such as smoking and cuff abscess; excessive pressure at the vaginal incision site e.g. coitus; pelvic floor defects and mode of surgery [2].

Preventive measures such as perioperative prophylactic antibiotics and good surgical techniques do aid in decreasing the incidence.

Following a cuff dehiscence, both abdominal and pelvic contents can be expelled through the vaginal opening and serious sequelae such as peritonitis, bowel injury, necrosis and sepsis can result from bowel evisceration and as such, prompt medical and surgical intervention should be undertaken.

Conclusion

There should be a high index of suspicion in patients' post total laparoscopic hysterectomy who present with a sudden onset of

pelvic pain especially after coitus and despite the appearance of a well healed vaginal vault, there is always the possibility of a rupture at first and subsequent coitus and these should always be discussed preoperatively as part of the informed consent.

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