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Operative Laparoscopy and Vulvar Hematoma: An Unusual Association

Iacob Marcovici, MD, Elizabeth Shadigian, MD

ABSTRACT

Few cases of intraoperative or postoperative complications associated with laparoscopic adnexal surgery have been reported in the literature. We describe a case of laparoscopic abdominal vascular injury and persistent bleeding in the matrix of the ovary following laparoscopic cystectomy. During the first postsurgical day, the patient was syncopal. The physical examination showed a vulvar hematoma and minimal bleeding from a laparoscopic incision in the abdominal wall. Vulvar hematoma and an unstable patient may signal serious vascular bleeding.

Key Words: Operative laparoscopy, Vulvar hematoma.

INTRODUCTION

Nonpuerperal vulvar hematomas are uncommon and are often the result of blunt trauma like overzealous coitus, physical assault, and straddle-type injury resulting from such activities as bicycle riding, using recreational devices like the "mechanical bull," cross-country skiing, and riding a go-cart. Sometimes vulvar ecchymoses may be a cutaneus sign of acute pancreatitis. We present here a case of vulvar hematoma, which occurred after laparoscopic ovarian cystectomy.

CASE REPORT

The patient, a 23-year-old, para 0, underwent a laparoscopic ovarian cystectomy for an asymptomatic 12 x 8-cm mass. The mass was filled with 2 to 3 large loculated areas with clear, serous colored fluid. Although the surgery was "uncomplicated and with minimal blood loss," the patient presented to the clinic the first day after her surgery with complaints of nausea, vomiting, and an episode of syncope. The patient was orthostatic with a blood pressure of 80/40 and a pulse of 108. Her hematocrit had dropped to 15% from a preoperative value of 34%. The physical examination was significant for a soft, nondistended abdomen with mild-to-moderate tenderness, with no rebound or guarding. A laparoscopic incision with bloody discharge existed, and the perineum had a vulvar hematoma **(Figure 1)**. A vaginal examination showed no significant tracking hematoma.

At laparotomy, bleeding could be seen from both the left superficial epigastric vessel and from a large ventral wall subcutaneus hematoma. Also, bleeding was noted at the base of the prior cystectomy, and approximately 2,000 cc of blood was present in the abdomen. The patient made a full recovery.

DISCUSSION

The subcutaneus tissue of both vulva and vagina are loose and can accumulate a large amount of blood before obvious signs and symptoms of a hematoma become apparent. Although not common, vulvar and vaginal hematomas may cause significant morbidity. The case presented here may be the first to describe an asso-

Clinical Assistant Professors, Department of Obstetrics and Gynecology, University of Michigan, Ann Arbor, Michigan, USA (all authors).

Address reprint request to: Iacob Marcovici, MD, Department of Obstetrics and Gynecology, University of Michigan, L 4000 WH, Box 0276, 1500 E. Medical Center Drive, Ann Arbor, MI, 48109-0276, USA. Telephone: (734) 936-3110, Fax: (734) 936-7722, E-mail: marcovic@umich.edu

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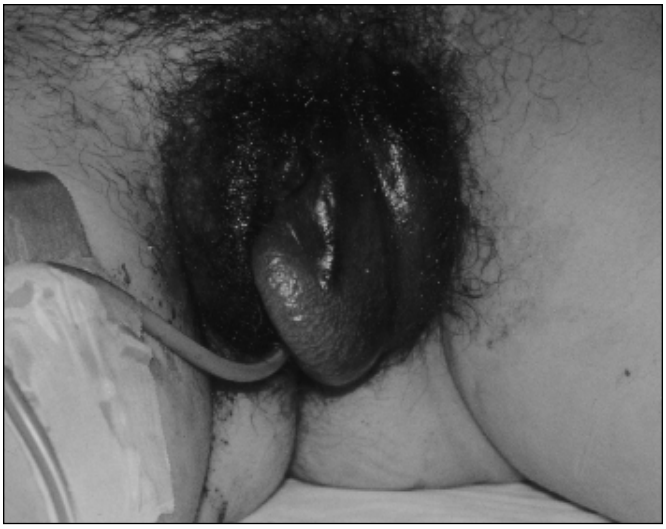

Figure 1. Post-laparoscopic vulvar hematoma.

ciation between operative laparoscopy and vulvar hematoma. Failure to recognize intraoperative bleeding during laparoscopic procedures can be attributed to the tamponade effect of pneumoperitoneum and to decreased venous return due to the steep Trendelenburg position. To underline the challenges of laparoscopic postoperative bleeding, Wong et al[1] described 3 cases of intra-abdominal bleeding following laparoscopic adnexal surgery. In 2 of the 3 cases, postoperative exploratory laparotomy failed to identify the source of bleeding.

To address the abdominal vascular wall injury at laparoscopy, Balzer et al,[2] studying the vascular anatomy of the abdominal wall in 21 human cadavers, found that from 36 trocar incision sites, recommended commonly in the literature, half incur the risk of vascular injury.

To minimize the danger of causing lesions in the large abdominal vessels, Balzer et al[2] suggest locating the trocars in the ventral midline or ion, a zone 5-cm in width lateral to the lateral border of the rectus sheath.

CONCLUSION

Hemorrhage during any surgery, although highly undesirable, is not always avoidable. Vulvar hematoma can occur after laparoscopy. Postlaparoscopic vulvar hematoma and an unstable patient signal serious vascular bleeding.

References:

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