Pessary-Induced Traumatic Vaginal Evisceration Following A Motor Vehicle Crash

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Citation

Abstract
Vaginal evisceration after a motor vehicle crash caused by a pessary has not been reported. This case was missed at the first emergency department visit, highlighting the importance of taking a careful gynecologic history in patients with trauma.

INTRODUCTION
Visceral vaginal evisceration following a motor vehicle accident is a rare event. We report a case of herniation and prolapse of intra-abdominal contents through a traumatic rupture of the vaginal vault into the introitus following a motor vehicle accident.

CASE
The patient was a 56-year-old postmenopausal female who had years in the past undergone a vaginal hysterectomy. Postoperatively she developed a vaginal vault prolapse and was using a #7 ring pessary to support the vaginal vault until definitive repair could be done. On the day of admission to the emergency department she was the restrained driver in an automobile accident in which her automobile was struck on the right front side. There was no intrusion into the driver's space but significant damage to her automobile. The patient complained of generalized aches and pains including some minor suprapubic pain. She was subsequently evaluated and released. Over the next 48 hours she had increasing abdominal and suprapubic pain. The pain became so severe that an ambulance and paramedics were called to her home. Prior to the arrival of emergency personnel she removed the pessary and the vaginal vault prolapsed through the introitus, containing herniated viscera. The exam in the emergency department was unremarkable except for the protrusion of epiploic fat of the small bowel through an approximately 4 cm long laceration of the vaginal vault (Figure 1, left). A CT Scan of the abdomen revealed a small amount of free air in the pelvis. There was no incarceration of the small bowel and the decision was made to repair the defect in the vaginal vault through a vaginal approach (Figure 2). The patient was taken to surgery. A pack was placed in the vagina and the vault prolapse was reduced. The patient was placed on prophylactic antibiotics and her recovery was uneventful. Elective abdominal vaginal vault suspension at a later date was scheduled.
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**DISCUSSION**

Little is written about the problems associated with vaginal prolapse and seat belt trauma. Vaginal evisceration is even less common. There have been no cases reported of pessary-induced vaginal tears resulting from seat belt trauma leading to intra-abdominal content evisceration following a motor vehicle accident. This case describes a predictable injury of the superior vaginal vault by a pessary which produced a rent in the vault of the vagina. The injury was missed at the time of the initial evaluation and was only noted when the patient herself removed the pessary because of increasing abdominal pain. Only 51 cases of vaginal evisceration have been reported in the world's literature. Small bowel and omentum comprise 95% of viscera herniations. Vaginal evisceration occurs in post-menopausal women who have atrophied pelvic support structures and thin vaginal walls. Parity and previous hysterectomies also contribute to the development of vaginal evisceration. In the case we are reporting, the patient received a two-stage repair. In the first stage, the contents of the hernia were reduced and the vault tear was repaired. A follow-up suspension was completed at a later date. Since there was only epiploic evisceration, there was no need for an abdominal approach following the Nichols model.

This case illustrates a significant complication in patients using a pessary who suffer seemingly minor trauma such as a seat-belt injury. The recognition of this injury is of paramount importance as complications can be significant. Further, a full examination should be performed to evaluate for injury in all patients who are using a pessary, especially those who are symptomatic. In the post-menopause motor vehicle accident victim, a brief bimanual exam may be a useful adjunct to the obligatory rectal exam. In the older female patient, the surprising result may be the discovery of a pessary that will alert the physician to vaginal injuries.

**REFERENCES**

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