# What's falling down?

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*Abstract:* BACKGROUND: vaginal prolapse beyond the hymenal ring is occasionally seen in emergency services and apart from patient's discomfort it doesn't represent a surgical emergency. There are very few exception to this general rule: vaginal bowel evisceration is one of these exceptional condition. CASE: an 87 years old woman presented to our gynaecologic emergency service complaining of sudden lumping within her legs. A portion of viable small bowel was observed beyond the hymenal ring. An emergency abdominal approach was performed to reduce the bowel and reconstruct the vaginal cuff. The lady recovered uneventfully. CONCLUSION: women complaining of lumping discomfort have to be quickly examined to rule-out rare, but serious clinical conditions. No standard surgical approach is available, depending both on patient's clinical local and general conditions and on surgeon skills with different techniques.

#### INTRODUCTION

Vaginal evisceration is a rare condition, mainly reported after previous hysterectomy in postmenopausal women<sup>1</sup> even though it is sporadically reported in women without previous pelvic surgery<sup>2</sup>. It is commonly considered that the cornerstone in the management of this rare and potentially life threatening condition is a quick diagnosis and prompt surgical intervention.<sup>1-4</sup> Some debate can be reserved for the most appropriate surgical approach.<sup>5</sup>

#### CASE

We report a case of an 87 years old woman that was carried by the emergency service to our Obstetrics and Gynecologic emergency unit complaining of a sudden sensation of something falling down vaginally between her legs while doing her housework. Symptom onset was less than one hour at the time of presentation to our Casualty service.

At physical examination as clearly shown in Figure 1. the lady had a consistent portion of her small bowel extruded from her vaginal cuff, coming completely out of the hymenal ring. No bleeding was present and the extruded bowel had a healthy aspect without signs of vascular injury, nor dehydration.

On history taken the lady was primiparous and underwent an abdominal hysterectomy and bilateral adnexectomy for a benign adnexal cyst three years before. The lady also referred a gynaecological examination within the last year: a no better specified vaginal prolapse was observed but no surgery was considered.

After cautious vaginal exploration the possibility to reduce the bowel manually in the emergency room was considered unsafe due to the small size of the vaginal hole and the risk of a vascular iatrogenic injury. A General Surgeon was



Fig. 1 - Viable small bowel protruding through the vagina.

consulted and an abdominal surgical exploration was decided in order to reposition the bowel under direct vision.

The extruded bowel was then covered with a saline wet gauze and kept into a plastic bag with 500 ml saline solution. Blood samples and ECG were taken and within 40 minutes the lady underwent a general anaesthesia. A longitudinal ombelico-pubic incision was performed starting preoperatively a double regimen antibiotic therapy (Cephalosporin 1 gr x 3/die and Metronidazole 500 mg x 2/die). At abdominal exploration the remaining intraabdominal portion of the bowel was normal. The extruded small bowel was then gently pushed through the opened vaginal cuff into the abdomen under direct vision and its vascular tree carefully examined confirming that no vascular sufferance was present. Then the vaginal cuff was examined observing a 2 cm transverse hole.

The edges of the vaginal cuff were resected. Histology documented a picture of chronic inflammatory condition. The cuff was then sutured and suspended to the remnant of the uterosacral ligament identified on the patient right side.

The lady recovered uneventfully, she opened her bowel spontaneously on the fourth and was discharged on the fifth postoperative day.

At follow-up one month later she was well with a well suspended vaginal apex and normally functioning bowel.

#### COMMENT

In his 2002 literature review Ramirez et al. reported a total of 59 cases of vaginal exenteration, mainly after vaginal surgery (63%), some after abdominal (32%) and very few after laparoscopic surgery (5%). The surgical management can be debateable. In fact we discussed within our team the possibility of approaching this case laparoscopically. We believe that a laparoscopic diagnostic step could have been considered. Nevertheless both the gynaecologist (AC) and the general surgeon (CB) involved in this case felt themselves more confident with a more traditional manual visceral handling because of the unpredictable strength to be applied to the bowel and its vascular tree in the effort of reducing it. We are of the opinion that the possibility of approaching the case in a less invasive manner (i.e. laparoscopically) relies entirely on the surgeon's feeling; the quick and uneventful recover of this 87 years old lady is in favour of the adopted strategy.

What is out of debate, in this case, is that when a lady comes to the emergency complaining of some lumping within her legs is it wise to get a quick eye to check "what's falling down?".

#### REFERENCES

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## **Pelvic Floor Digest**

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[Alternatives to colonoscopy and their limitations.] *Chaput U, Oudjit A, Prat F, Chaussade S. Presse Médicale EPUBDATE: 2009-12-08.* Conventional optical colonoscopy's morbidity and poor acceptability have led to the development of alternative techniques. Colo-TC has the best recognized performance (sensitivity 85% and specificity 97% for the detection of polyps>9 mm), but because of its irradiating nature MRI would be preferable: work on the topic is less abundant at the moment. Capsule endoscopy (the Pill-cam) for the colon is promising (sensitivity 64%, specificity 84%, positive predictive value 60%, negative predictive value 86% for detecting polyps>6mm). Improvements for standard colonoscopy (Aer-O-Scope, Invendoscope, CathCam colonoscopy) are in their infancy.

#### **4 PROLAPSES**

[**Risk factors and prevention of genitourinary prolapse**.] *Ragni E, Lousquy R, Costa P et al. Progrès en Urologie. EPUBDATE: 2009-12-09.* Vaginal delivery increases the risk of prolapse (proof level 1), though the Cesarian section cannot be considered a completely effective preventative method (proof level 2). The pregnancy itself is a risk factor for prolapse (proof level 2). Certain obstetrical conditions contribute to the alterations of the perineal floor muscle: a foetus weighing more than 4 kilos, the use of instruments at birth (proof level 3). If the risk of prolapse increases with age, intrication with hormonal factors is important (proof level 2). The role of hormonal replacement therapy remains controversial. Antecedent pelvic surgery has also been identified as a risk factor (proof level 2). Acquired factors as obesity, intense physical activity, constipation, increase the risk (proof level 3).

**[Update on the epidemiology of genital prolapse].** Lousquy R, Costa P, Delmas V, Haab F. Progrès en Urologie. EPUBDATE: 2009-12-09. The prevalence of pelvic organ prolapse (POP) varies between 2.9 and 11.4% in questionnaire-based studies. Aging is significantly associated with the prevalence and severity of POP. Pelvic disorders are a health economic challenge for the future due to the longer life expectancy of women and to an increasing demand for a better quality of life.

[Urodynamics and prolapse.] *Hermieu JF. Progrès en Urologie. EPUBDATE: 2009-12-09.* With urogenital prolapses bladder outlet obstruction and stress urinary incontinence are common findings. The diagnosis of stress urinary incontinence is made by physical examination, urodynamic tests are crucial to decide the most appropriate treatment for each individual patient. Despite some technical limitations, we recommend that a proper urodynamic investigation should be performed before any surgical intervention for urogenital prolapse.

[The role of ultrasound in the exploration of pelvic floor disorders.] Lapray JF, Costa P, Delmas V, Haab F. Progrès en Urologie. EPUBDATE: 2009-12-09. Pelvic and endovaginal ultrasounds should be systematic. Perineal and introital dynamic ultrasound allows the appreciation of the bladder neck and urethral mobility, certain complications with suburethral tape and pelvic mesh, post-mictional residual. Endoanal ultrasound is the first line morphological examination of the anal sphincter.

[Non surgical treatment of prolapse.] Conquy S, Costa P, Haab F, Delmas V. Progrès en Urologie. EPUBDATE: 2009-12-09. In case of stage 1 prolapses or surgical contra-indication, some non surgical treatment can be proposed: there is no proof of efficacy of hormonal treatment. Pessaries give 58 to 80% satisfaction, vaginal discomfort being improved by local estrogenotherapy. Pelvic floor training in moderate prolapse can be useful. Prevention includes careful delivery management, struggle against overweight, carriage of weight, chronic cough, etc.

**Risk factors for mesh erosion 3 months following vaginal reconstructive surgery using commercial kits vs. fashioned mesh-augmented vaginal repairs.** *Finamore PS, Echols KT, Hunter K et al. International urogynecology journal and pelvic floor dysfunction. EPUBDATE: 2009-12-05.* To establish retrospectively the overall graft erosion (exposure of any mesh upon visual inspection of the entire vagina) rate in a synthetic graft-augmented repair 3 months postoperatively, 124 grafts were evaluated. The overall erosion rate was 11.3%. There was a significantly lower erosion rate when using "commercial kits" vs. traditional repairs (1.4% vs. 23.6%).

Effects of colpocleisis on bowel symptoms among women with severe pelvic organ prolapse. *Gutman RE, Bradley CS, Ye W. International urogynecology journal and pelvic floor dysfunction. EPUBDATE: 2009-12-05.* Most bothersome bowel symptoms resolve after colpocleisis, especially obstructive and incontinence symptoms, with low rates of de novo symptoms. This was demonstrated in 152 women evaluated with the Colorectal-Anal Distress Inventory (CRADI) and the Colorectal-Anal Impact Questionnaire (CRAIQ),

[Should a hysterectomy be carried at the same time as surgery for a prolapse by vaginal route?] Debodinance P, Fatton B, Lucot JP. Progrès en Urologie.EPUBDATE: 2009-12-09. Hysterectomy during vaginal surgery for prolapse is indicated for major hysterocele or in case of concomitant uterine pathology. The anatomical and physiopathological facts are in favour of uterus or cervix preservation that does not modify the anatomical results of prolapse surgery. If a mesh is used, uterine or cervix preservation reduce the chance for a vaginal erosion. The sexual consequences, aside the narrow vaginal tube, are more psychological than objectively proved. The wish of pregnancy in young patient must leads to conservative procedures with sacrofixation (Richter or Richardson) better than cervix ablation (Manchester procedure).