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CASE REPORT

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# The use of steroid pessaries vaginally in the management of unexplained vaginal ulcers

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**Abstract** This case report deals with the difficult problem of a non-malignant vaginal ulcer of unexplained aetiology. We report the value of topical steroids in assisting its healing when conventional therapy had been unsuccessful.

**Keywords** Vaginal ulceration · Topical steroid · Tampon use

## Introduction

This case report follows the treatment of an unexplained vaginal ulcer with topical steroids in the form of prednisolone vaginal pessaries.

## Case report

A 45-year-old Caucasian parous woman presented with an 18-month history of offensive vaginal discharge varying in colour and consistency.

She had been using tampons for menstrual protection over the previous 2 years. The rest of her medical history was unremarkable and her cervical cytology screening history was normal.

General, physical and abdominal examinations were all essentially normal. Pelvic examination was essentially normal except for an ulcerated area on the anterior fornix of the vaginal wall measuring 4×2 cm, which looked denuded of squamous epithelium. All genital tract swabs were negative, showing normal vaginal commensals.

Colposcopic examination of this area showed a punched out ulcer appearing much reddened in comparison to the surrounding vaginal epithelium, which appeared normal. Biopsy of the area was reported as non-specific inflammatory changes.

Further investigations, including barium enema, follow-through and colonoscopy to exclude chronic inflammatory bowel disorders and malignancy were all negative. A pelvic ultrasound scan was normal and a second opinion at the Gynaecological Cancer centre excluded any other diagnosis. Consequently, a diagnosis of vaginal ulceration, most likely secondary to tampon use, was made.

Initial management with Aci-jel and discontinuation of tampon usage did not alleviate her symptoms. It was then decided to try local steroids in the form of a 5-mg prednisolone pessary to be inserted vaginally each night. At the end of 3 months there was a remarkable reduction in the area of ulceration with complete healing by the end of 6 months.

## Discussion

The occurrence of vaginal ulcers, epithelial alterations and toxic shock syndrome has been associated with vaginal tampon usage, which is used widely as an acceptable and convenient method of menstrual protection. Tampons have little effect on the vaginal microflora [1], but causes epithelial drying and ulceration in comparison to pad use. The incidence of these changes is not related to the presence of *Staphylococcus aureus* [2].

A literature review revealed 36 reported cases of tampon-induced vaginal or cervical ulceration. All the cases were benign and spontaneous healing occurred in 75–100% of cases with discontinuation of tampon usage alone [2, 3]. A cure was also obtained when the area was excised and sutured [3]. The use of steroids (prednisolone pessary) as an effective treatment has not previously been reported.

Ulceration is reported to occur in young women (<25 years), nulliparous or primiparous (79%) , who use tampons during their menstrual period and inappropriately intermenstrually (75%) [3]. The ulceration is always

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characteristic in appearance: it is a punched-out area, round or oval in shape, and is situated in the upper third of the vaginal barrel near where the tampon presses on to the vagina.

In this case report, the patient was 45 years old, multiparous and presented with vaginal discharge and vaginal ulceration associated with continuous use of super-absorbent tampons. There were no detectable associated organisms. Tampon products containing super-absorbents are significantly more likely to produce microulcerations than conventional tampons, especially when worn at times other than during active menstruation [3]. These alterations can lead to clinically obvious lesions of the vagina, and this aetiology should now been considered in the differential diagnosis of vaginal ulcers. In this case, the discovery of vaginal ulceration secondary to the use of menstrual tampons was a diagnosis of exclusion. Other differential diagnoses were considered, including adenosis of the vagina, herpetic ulceration, a syphilitic chancre, vaginal cancer, inflammatory bowel disease, connective tissue disease and dermatological conditions.

Histological examination of the lesion showed non-specific inflammatory changes. Colposcopically, visible alterations of the vaginal epithelium associated with the use of tampons were identified. The pathophysiology of these transient changes appears to involve fluid transfer with subsequent impairment of intercellular bridges and loss of cell coherence [4], and this is particularly aggravated by tampon use at times of the cycle when there is no menstruation.

Conventional treatment failed to resolve our patient's symptoms and despite the lack of licence for its use, prednisolone in the form of a pessary used vaginally plus discontinuation of tampon use resulted in a complete cure in this case. Prednisolone is indicated in the suppression of inflammatory and allergic disorders.

In cases in which vaginal ulceration occurring with tampon use fails to respond to discontinuation of tampon use, we would recommend the consideration of prolonged use of prednisolone pessaries vaginally as a possible alternative, although this may require some negotiation with the local pharmacist.

## References


1. Onderdonk AB, Zamarchi GR, Rodriguez ML, Hirsch ML, Muñoz A, Kass EH (1987) Quantitative assessment of vaginal microflora during use of tampons of various compositions. Appl Environ Microbiol 53:2774–2778
2. Berkeley AS, Micha JP, Freedman KS, Hirsch JC (1985) The potential of digitally inserted tampons to induce vaginal lesions. Obstet Gynecol 66:31–35
3. Raudrant D, de Haas P, Saintfort P (1987) Vaginal ulceration induced by abuse of tampons. J Gynecol Obstet Biol Reprod (Paris) 16:467–469
4. Friedrich EG (1980) Tampon-associated vaginal ulcerations. Obstet Gynecol 55:149–156