Unusual association of diseases/symptoms

Incarcerated foreign body in the vagina – a metal bangle used as a pessary

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Correspondence to Professor Papa Dasari, dasaripapa@gmail.com**Summary**

Long-forgotten vaginal pessaries get incarcerated in the vagina and their removal poses problems. A 60-year-old postmenopausal woman presented with foul smelling purulent discharge per vaginum and stress incontinence. Speculum examination revealed foul smelling white discharge per vaginum and a friable vaginal wall which bled on touch. The anterior portion of a metal ring deeply embedded in the vagina was seen. The cervix appeared normal. Attempts of removal by traction under local infiltration failed and resulted in bleeding. Biopsy from the tissue covering the ring reported no evidence of malignancy. She was treated with broad-spectrum antibiotics for 1 week and the metallic ring was removed without any complications under general anaesthesia using electrocautery. It was found to be a metallic bangle with design. It is essential to gently cauterise and release the fibrosis over the incarcerated foreign body to achieve safe removal.

BACKGROUND

Forgotten pessary is one of the rare causes of foul smelling discharge per vaginum. Careful evaluation especially proper history elicitation is important.

Vaginal fibrosis over the long-forgotten foreign body precludes its detection on clinical examination.

Safe removal of the incarcerated vaginal foreign body is essential and requires skill and experience.

CASE PRESENTATION

A 60-year-old multiparous postmenopausal lady presented to our outpatient department with foul smelling white discharge per vaginum for 3 months. She also gave history of involuntary passage of urine on coughing or straining for the past 3 months. She was referred from an outside hospital for ring pessary removal. She gave history of insertion of something per vaginum during the immediate postpartum period 30 years back, after her last child birth. She could not give the reason for such procedure most probably it was for uterovaginal prolapse encountered at that time. She is postmenopausal since 10 years and there was no history of postmenopausal bleeding or family history of malignancies. She was not a known diabetic or hypertensive.

On examination, her general condition was good. Stress urinary incontinence was demonstrable.

Speculum examination revealed foul smelling discharge per vaginum and a friable vaginal wall which bled on touch. The cervix was healthy and appeared normal in position. There is no evidence of significant descent of cervix at present. The anterior portion of a metal ring deeply embedded in the vagina could be seen just under the symphysis pubis (figure 1). Bimanual pelvic examination revealed normal sized uterus and there was no mass in fornices. Removal of the ring was attempted under local infiltration by applying minimal traction on the portion which was visible under the symphysis pubis. This resulted in bleeding and severe pain and hence the procedure was

abandoned. A biopsy was taken from the area of vagina which was bleeding on touch. A diagnosis of deeply incarcerated foreign body most probably a metallic bangle was made and she was hospitalised.

INVESTIGATIONS

- ▶ Vaginal biopsy-no evidence of malignancy; inflammatory infiltrate
- ▶ Vaginal swab culture-moderate growth of *Candida* species(non-albicans)
- ▶ Urine culture-sterile
- ▶ X-ray pelvis anteroposterior view-radio opaque ring in lower pelvis. Normal pelvic bones
- ▶ Haemoglobin-13 g%
- ▶ Blood sugar (random)-70 mg/dl
- ▶ ECG-normal
- ▶ X-ray chest P/A-normal
- ▶ Pap smear-inflammatory cells.

DIFFERENTIAL DIAGNOSIS

Carcinoma vagina.

TREATMENT

The vaginal biopsy revealed an inflammatory neutrophilic infiltrate with bacterial colonies and no evidence of malignancy and she was treated with a course of broad-spectrum antibiotics, Cap doxycycline and metronidazole for 10 days. Continuous bladder drainage was established and vagina was packed daily with acriflavin glycerine pack. X-ray pelvis was taken for documentation and to rule out any bony erosion (figure 2). The patient was posted for examination under anaesthesia after relevant investigations.

Intraoperatively, a metallic aluminium bangle of diameter 10 cm was found to be incarcerated in the vagina with dense fibrosis. Rectal wall was superficially adherent posteriorly.

Figure 1 External genitalia with the anterior portion of metallic bangle seen as a shining arc under symphysis pubis.

Figure 2 X-ray pelvis anteroposterior view showing a round radio-opaque shadow in the lower part of pelvis with normal pelvic bones.

Figure 3 Metallic bangle after removal.

The vaginal fibrosis covering the ring was gently cauterised using monopolar cautery at 40 Watts and the ring was removed without any difficulty. It was confirmed to be a metallic bangle (figure 3) with design. There

was no haemorrhage except near the pubic rami where haemostasis was secured using cautery as well as 1-0 chromic catgut sutures. The vagina was packed with an acriflavine soaked pack which was removed the next day. Postoperative period was uneventful and her stress incontinence was relieved and she was discharged home after 5 days of observation.

OUTCOME AND FOLLOW-UP

Stress incontinence was relieved after removal of the incarcerated foreign body and vagina healed well at 3 weeks of follow-up.

DISCUSSION

Vaginal pessaries for treatment of uterovaginal prolapse were described in literature since the time of Hippocrates. They are made of different materials such as rubber, plastic, silicone etc. A retained metallic ring pessary has been described in literature,¹ but a metal bangle as a substitute for a pessary has not been reported before. Foreign bodies in vagina can be present for long duration without any symptoms but they cause life-threatening complications when they get deeply incarcerated. A case of peritonitis caused by a forgotten cotton reel self inserted 22 years back in childhood was reported as long back as 1873 by Pearse.² Recently a Jade bracelet impacted in the vagina of an 81-year-old woman was reported by Lien, *et al.*³ A vaginal pessary which was forgotten for 30 years in an older woman is also on record.⁴ In all these cases the clinical symptoms were foul smelling vaginal discharge and irregular bleeding per vaginum. Urinary symptoms were also common. Most of the time it is difficult to visualise the foreign body as it is covered by granulation tissue and pus.²⁻⁴ In the present case, the part of the bangle could be partially visualised below the symphysis pubis as shown in figure 1. This was because of the earlier attempts to remove it after excising the granulation tissue. Otherwise it was felt like a circumferential hard fibrosis in the upper part of vagina. The various methods used to evaluate the nature of foreign bodies in the vagina include plain x-ray pelvis, ultrasonography and MRI. MRI is useful in non-radio-opaque foreign bodies. Even though the nature of the foreign body was clearly seen and felt, x-ray pelvis was taken in this case to rule out any bony erosion and also for documentation. Complications of a retained pessary include chronic vaginitis, incarceration, ulceration and metaplasia⁵ and vaginal cancer.⁶ Other complications include fistula formation, vesicovaginal,⁷ rectovaginal,⁸ bowel obstruction,⁹ urinary tract infections and hydronephrosis.¹⁰ Retrieval of the deeply impacted foreign bodies is very difficult due to their fixation resulting from fibrosis. This is the reason for not encountering prolapse/descent of cervix when she presented to us now. Treatment with antibiotics, irrigation with antiseptic solution and packing has been shown to be helpful in such cases before attempting removal. Difficulty in extraction of the pessary was reported in almost all the cases and there is no specific technique that was described. Traction with various instruments¹¹ along with dissection and rotation and to and fro movements were described. In the present case, the tissue that was covering the metallic ring was

gently cauterised and this resulted in easy removal without any bleeding.

Learning points

- ▶ Impacted and forgotten foreign bodies especially forgotten pessaries should be suspected in older women presenting with complaints of foul smelling vaginal discharge.
- ▶ Complete assessment should be done before attempting removal.
- ▶ Careful cauterisation along the line of fibrosis over the surface of the pessary results in minimal bleeding and easy removal.
- ▶ Deeply impacted vaginal pessary can be one of the causes of stress incontinence.
- ▶ Urinary problems usually disappear after removal if there are no complications like fistula formation.

Competing interests None.

Patient consent Obtained.

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