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Vaginal Button Battery Insertion in an Adult Patient

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Objective

Button batteries are well recognised to pose a risk of serious injury following ingestion, particularly in children. However, exposure of other areas of the body to button batteries is rare. We describe an unusual presentation of button battery injury in an adult patient.

Case Report

A 28-year-old female presented to the Emergency Department reporting self-insertion of some batteries and pieces of a ceramic mug into her vagina. The patient requested removal of the foreign bodies as they were now causing discomfort. The presence of the batteries was confirmed by X-ray of the pelvis (Figure 1). An attempt was made to remove the foreign bodies, but the patient was unable to tolerate the examination. The patient was therefore examined under anaesthesia and a lithium button battery, two AAA batteries, and pieces of a ceramic mug were removed. The button battery had caused burns to the cervix and vagina, but the integrity of the bladder and rectum were preserved. The area was desloughed and vaginal irrigation performed.

Advice was sought from the National Poisons Information Service which recommended performing arterial blood gases (ABGs), including lactate, and observation of the patient to ensure that the integrity of the tissues had not been damaged and that the patient was passing urine and opening her bowels normally. The patient was acidotic while in theatre (pH 7.3, pCO2 6.6 KPa, bicarbonate 22 mmol/L, lactate 1.4 mmol/L), but repeat ABGs and lactate were normal. A urinary catheter was inserted post-operatively overnight, and urine which drained was clear. The patient's observations remained stable; the following day the urinary catheter was removed and she was mobilised.

The initial follow-up plan was to perform an MRI to assess for fistulas. However, the patient disclosed that she had metallic foreign bodies in situ in her leg, thus precluding an MRI. No further imaging or investigations were undertaken. Upon discharge the patient was advised of signs and symptoms to look out for that could indicate fistula formation.

Figure 1: Pelvic X-ray showing a lithium button battery and two AAA batteries in the vaginal cavity.

Conclusion

We conclude that examination under anaesthetic may be necessary to visualise the areas of injury and facilitate removal of button batteries in patients presenting with a history of button battery insertion into the vagina. Expeditious identification and removal of button batteries in the vagina are essential to prevent further injury and reduce the risk of long-term complications. Patients should be followed-up at regular intervals to check for the development of long-term sequelae.

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