Omphalolith

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Received: 18 June 2009 / Accepted: 1 August 2009 / Published online: 8 February 2011
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Abstract Omphalolith (Umbolith) is uncommon under normal circumstances. However in a deeply retracted umbilicus in an obese individual, accumulation of sebum and keratin may lead to the formation of a stone. This calculus may remain undiagnosed for many years until revealed by secondary infection or ulceration. We report an interesting case of omphalolith in an elderly woman.

Keywords Umbilicus · Omphalolith

An Omphalolith is uncommon under normal circumstances. In a deeply retracted umbilicus especially in an obese person accumulation of sebum and keratin may lead to the formation of a calculus known as Omphalolith. We present one such patient with a calculus in the umbilicus masquerading as chronic infection.

A 50 yr old woman presented with bloody discharge from the umbilicus of 2 months duration. The patient did not give any positive history of passage of mucous or faeces through umbilicus. The patient also did not give any history of difficulty in passing urine associated with watery discharge through the umbilicus. There was no history of fever. Physical examination revealed an elderly obese woman with a deeply retracted umbilicus. Local examina-

tion of umbilicus revealed, on palpation, a firm to hard mass of 3 cm size just beneath the umbilicus. Though there was no frank ulceration, there was evidence of sero sanguinous discharge from the crevices of umbilicus.

Routine laboratory examination of blood showed no abnormality. Urine examination was unremarkable. Ultrasonography revealed a hyperechoic lesion in the umbilical region which was interpreted as an inflammatory mass. Fine needle aspiration cytology was done and it was suggestive of inflammatory swelling. In view of her age, though she did not have any symptoms suggestive of dyspepsia or of upper gastrointestinal pathology, upper gastrointestinal endoscopy was carried out to rule out gastric malignancy. However there was no abnormality detected. In view of cytology report, the patient was diagnosed to have an inflammatory swelling and she was put on broad spectrum antibiotics for a week. However there was no improvement and her symptoms persisted. Hence the patient was taken up for exploratory surgery.

Under spinal anaesthesia, the patient was placed in a supine position. The part was cleaned and draped. An elliptical incision was made around the umbilicus. The incision was deepened and the lower flap was retracted upwards, when a single hard calculus was encountered and was extracted in toto (Fig. 1). The surrounding area was found to be a mass of inflammatory granulation tissue (Fig. 2). The entire mass along with the umbilicus was excised and the wound was left open. The patient was given parenteral broad spectrum antibiotics in the post operative period. Immediate post operative period was uneventful. After seven days, secondary suturing of the wound was done. The wound healed well and the patient was discharged. The histopathological examination of the specimen revealed chronic non specific inflammatory

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Fig. 1

Fig. 2

changes. The patient remained asymptomatic when reviewed six months later.

Discussion

At birth, the umbilical cord contains two arteries and a vein, the rudimentary urachus (allantois) and the vitelline (omphalo-mesenteric) duct enveloped in Wharton's jelly [1]. After separation and retraction of the stump, an umbilicus, a puckered scar in the centre of the anterior abdominal wall is formed. This umbilicus may have variable depth. In some cases persistence of the urachus or vitelline duct at the umbilicus may cause trouble in early or adult life [2].

A deeply retracted umbilicus in obese people may be the site of infection or foreign bodies. An accumulation of sebum and keratin may lead to the gradual formation of a hard stone like mass which may be revealed by secondary

infection as in this case. Mostly in these cases the umbilical calculus is black in colour and is composed of desquamated epithelium which becomes inspissated and collected in the deep recess of the umbilicus. In these cases, the treatment is to dilate the orifice and extract the calculus. But to prevent recurrence, it may be necessary to excise the umbilicus [3] as we have done in this case.

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