

# Omphalolith: A case report

Sajad Ahmad Salati

Department of Surgery, College of Medicine, Qassim University, KSA

**Abstract** Omphalolith is a benign umbilical growth, uncommonly reported in literature. The author managed one such lesion in a 43-year-old male. The patient was asymptomatic and was treated with complete evacuation on outpatient basis.

**Key words**

Omphalolith, corneocytes, umbilicus, evacuation.

## Introduction

Omphalolith is an uncommonly encountered benign umbilical lesion. It has multiple synonyms and signifies a calculous lesion occurring in both genders with deep umbilicus and poor personal hygiene. If the clinician is aware about the entity, management is easy and comprises of evacuation of the lesion. The author managed one such lesion and the case is reported due to relatively uncommon occurrence.

## Case Report

A 43-year-old male of Egyptian origin reported with an umbilical mass. The mass had been noticed incidentally six years ago and had the size of a pin head. The mass had grown gradually without any symptoms. There was no other medical or surgical history of significance. On examination, a darkish brown firm, non-tender mass was seen protruding from the umbilicus (**Figure 1a**). There were thick dirty looking scales along the walls of umbilicus but there was no discharge, sinus or any features of inflammation. On retraction of umbilicus, the mass was found to have a pearly white peduncle attached at the base of the deep umbilicus. The mass was manipulated

by a toothed forceps and evacuated without any bleeding. The umbilicus was cleansed and patient was counselled about umbilical hygiene. The specimen (**Figure 1b**) was confirmed as omphalolith on histopathological analysis (hematoxylin-eosin stained) which revealed laminated strips of keratin and some hairy material (**Figure 1c**). The patient was satisfied and there was no recurrence at three months follow-up (**Figure 1d**).

## Discussion

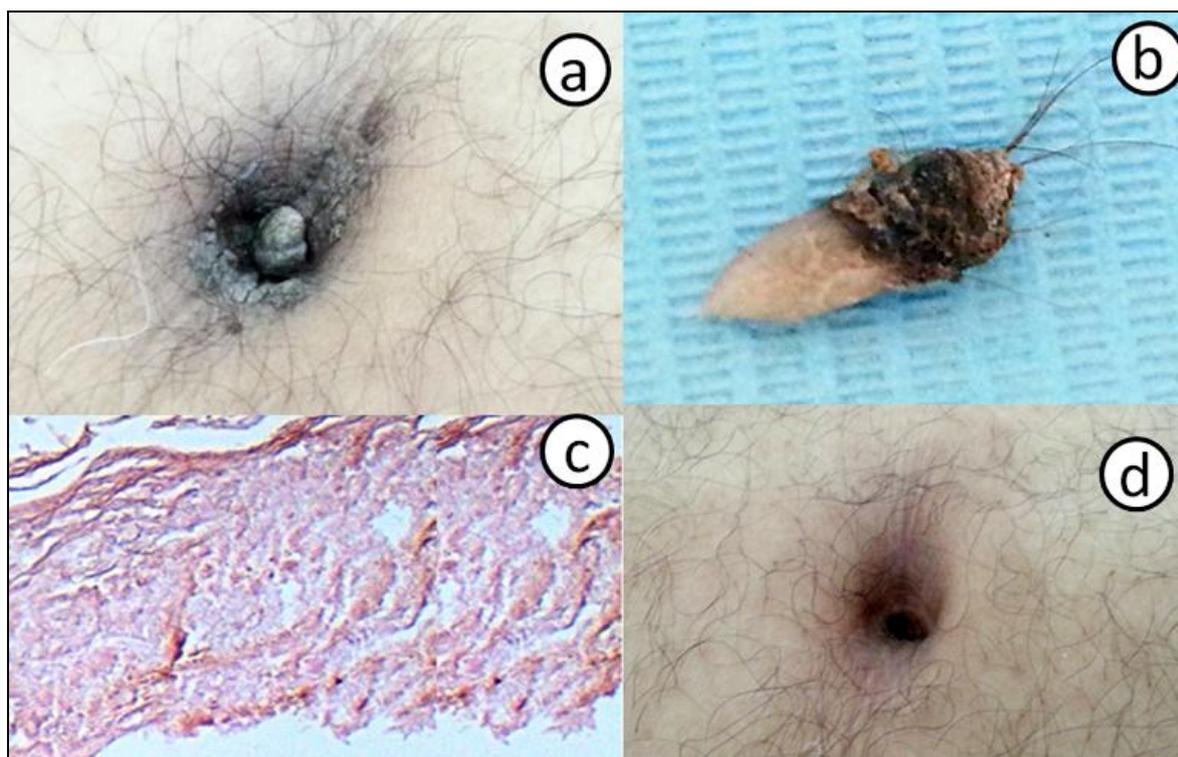
Omphalolith is uncommon and denotes a calculous lesion of umbilicus. The term is derived from Greek ('omphalos' meaning navel; 'lithos' meaning stone). The synonyms mentioned in literature include omphalokeratolith, umbilical bolus, inspissated umbilical bolus, navel stone, umbilical concretion and umbolith.<sup>1</sup>

The condition tends to occur in people with deep, invaginated umbilicus. Corneocytes (differentiated keratinocytes in stratum corneum) get retained within the deep recess of the umbilicus and over time (usually years), these cells along with sebum get compressed into a hard and compact bolus forming a kind of a pseudocomedone with firm attachment at the base of umbilicus. The mass is blackish to brown corresponding to the skin colour of the patient. This colour is attained due to the presence of melanin and oxidised lipids.<sup>2</sup> Some studies have related the development of

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### Address for correspondence

Dr. Sajad Ahmad Salati  
Assistant Professor of Surgery  
College of Medicine,  
Qassim University, KSA  
Email: docsajad@yahoo.co.in



**Figure 1** (a) Omphalolith protruding out of umbilicus. (b) Excised omphalolith showing pearly white peduncle, darkish cap and entangled hair. (c) Microscopic section (hematoxylin-eosin) showing lamellae of corneocytes. (d) Deeply placed umbilicus at three months follow-up.

omphalolith to poor umbilical hygiene. There is no race or gender predilection.<sup>3</sup> Occasional cases have been reported in association with seborrheic keratosis.<sup>4</sup>

Omphaloliths are generally asymptomatic<sup>3</sup> and may present clinically only when complicated by infection or inflammation or infection resulting in symptoms like relapsing discharge, redness or pain. There are reports of rare cases presenting as peritonitis due to rupture of umbilical abscess secondary to omphalolith.<sup>2</sup> Occasionally pyogenic granulomas may appear and grow rapidly bringing the patient to clinician.<sup>5</sup> The differential diagnosis includes umbilical cholesteatoma, dermatofibroma, keloid, malignant melanoma, umbilical endometriosis and Sister Mary Joseph nodule (metastasis).<sup>6</sup>

The diagnosis is generally arrived at on the basis of history and clinical examination though occasionally imaging like transabdominal ultrasonogram, MRI and CT

scan may be needed in early symptomatic or doubtful cases.<sup>1,3</sup> Rarely, the diagnosis may be arrived at, only after surgical exploration of umbilicus.<sup>2</sup>

Management is non-invasive evacuation of the concretion and cleansing of the umbilicus. Histopathology confirms the diagnosis and reveals mass of stratified corneocytes.<sup>2</sup>

### Conclusion

Omphalolith is an uncommonly encountered benign umbilical lesion and clinicians should be aware of the entity so that the patient can be reassured and treated non-invasively on outpatient basis.

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