ISSN: 0975-8585

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Rare Case of Omphalolith With Umbilical Abscess: A Case report.

Kiran Madhusudhan[1]*, Madhusudhan[2], and Pujita Bandi[2].

[1]Department of Microbiology, Sree Balaji Medical College and Hospital, BIHER, Chennai-44, Tamil Nadu, India.
[2]Department of Surgery, BRS Hospitals, Chennai-34, Tamil Nadu, India.

ABSTRACT

Omphalolith or Umbolith is relatively rare under normal conditions. It is seen in obese individuals with a deep and retracted umbilicus due to accumulation of sebum and keratin leading to calculus formation. Here is a case of an umbilical stone presenting as an umbilical abscess, admitted in surgical department for surgical management.

Keywords: Omphalolith, Umbolith, Umbilical stone, Umbilical abscess.

https://doi.org/10.33887/rjpbcs/2021.12.1.6

Corresponding author

ISSN: 0975-8585

INTRODUCTION

Omphalolith ('Omphalos' meaning navel, 'lithos' meaning stone) is an uncommon benign umbilical lesion. It occurs in obese people of both genders with a deep umbilicus and poor personal hygiene. There is accumulation of sebum, keratin and dirt leading to calculi formation which may remain undiagnosed for years, until revealed by secondary complications such as infection or ulceration[1,2].

CASE REPORT

A 28 year old male came to surgical outpatient department with complaints of pain and swelling in the umbilicus for past one week duration. He had taken treatment outside with antibiotics and analgesics for a period of 3 days. No history of fever, nausea, vomiting or altered bowel habits. There was no referred pain and micturition was normal. General and systemic examination was normal.

Local Examination: showed a 3cms x 2cms swelling in the umbilical area, with surrounding induration (Figure 1.) and tenderness during palpation. No ulceration seen. A provisional diagnosis of umbilical abscess was made.

Imaging and Lab investigations: USG abdomen showed no internal pathology. There was peri-umbilical collection of fluid with hyper-echoic mass in the subcutaneous plane. Routine lab investigations of blood and urine were reported normal.

Pre-operative diagnosis of an omphalolith with umbilical abscess was made. Patient was started on parenteral broad sprectrum antibiotics. Under spinal anaesthesia, incision and drainage of the abscess was done. Abscess cavity was explored and with gentle manipulation, the umbolith (2 cms x 2 cms) was removed in toto (Figure 2.). The wound was thoroughly washed, cleaned, and dressed.

Culture of pus showed no growth. HPE report of the calculus material removed, showed sebum with keratin material and multiple stratified corneocytes confirming an umbolith. Patient was discharged on the 2nd Post-op day and advised alternate day dressing. After 10 days, review of wound showed complete wound healing.

Figure 1: Pre-op picture of patient with Omphalolith and surrounding induration.

ISSN: 0975-8585

Figure 2: Ombolith specimen after removal.

DISCUSSION

Ompholith or Umbolith is a rarely encountered benign entity. It is a stone like concretion of different size, shape and colour and generally takes the colour of the skin. It is a collection of keratinaceous and sebaceous material with dirt and sometimes hair in the deep umbilical cleft in obese and hairy individuals. Lack of umbilical hygiene acts as a primary risk factor [3-5].

It is also known as Omphalokeratolith, umbilical bolus, umbilical concretion or naval stone. Umbilical stones are asymptomatic and remain undiagnosed for many years until revealed by secondary complications such as infections or ulceration. The infection may spread through the skin causing peri-umbilical cellulitis and can rarely present with peritonitis [6]. The umbilical stone could be mistaken for other benign and malignant tumors of the umbilicus such as keloid, dermatofibroma, cholesteatoma, umbilical endometriosis, primary malignant or metastasis (Sister Mary Joseph nodule) [7]. Radiological diagnosis by x-ray, USG and CT scan are useful [8].

If patient presents at an infective phase without abscess formation, the treatment is non-invasive evacuation of the concretion by moistened cleansing. In case of abscess formation, treatment is by incision and drainage with evacuation of calculus. In recurrent cases, it may be necessary to excise the umbilicus to prevent complications.

CONCLUSION

Awareness and recognition of the diagnosis of the umbilical stone is important due to rarity of the condition and need to differentiate it from other common benign and malignant conditions of the umbilicus and also to avoid unnecessary imaging procedures. This condition can be prevented by following simple and routine umbilical hygienic measures.

REFERENCES

[1] Mihara K. Omphalolith:An umbilical concretion to recognize. J Gen Intern Med. 2016;31:1396.
[2] Ichiki Y, Kitajima Y. Omphalith. Clin Exp Dermatol. 2008;34:420–1
[3] Kumar SKL, Reddy CO, Reddy K. Omphalolith. Indian J Surg. 2011;73:238-9.

[4] Russell RCG, Williams NS, Bulstrode CJK (eds) 2004 Bailey and Love's Short Practice of Surgery, 24th edn. Holder Arnold, London p 1285

[5] Burns T, Breathnach S, Cox N, Griffiths C. The general, perineal and umbilical regions. Rook's textbook of dermatology, volume 4, 7th ed. Blackwell Science. 2004:102-168.

[6] Mahdi HR, El Hennawy HM. Omphalolith presented with peritonitis: a case report. Cases J. 2009;2(1):8191.

[7] Swanson SL, Woosley JT, Fleischer Jr AB, Crosby DL. Umbilical mass. Omphalith. Archiv Dermatol. 1992;128(9):1267-70.

[8] Nittala P. Omphalolith/umbolith:CT and MR imaging appearances in two patients. Singapore Med J. 2009;50:745.