#### CLINICAL IMAGE

# Meckel's diverticulum and indications for resection

## Razrim Rahim 🗓

Department of Surgery, Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Kuala Lumpur, Malaysia

### Correspondence

Razrim Rahim, Department of Surgery, Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Level 13, B Block, Persiaran MPAJ, Jalan Pandan Utama, Pandan Indah, 55100 Kuala Lumpur, Malaysia. Email: razrimrahim@gmail.com

#### **Abstract**

Meckel's diverticulum (MD) is a rare congenital abnormality. Not all MD require resection. MD is resected when it is symptomatic; when it causes perforation, bleeding, or intestinal obstruction; or when malignancy is confirmed or suspected.

#### KEYWORDS

incidental, indication, Meckel's diverticulum, resection

## 1 | QUESTIONS

- 1. The picture (Figure 1) was taken during surgery where the preoperative diagnosis was acute appendicitis. What is the intra-operative diagnosis?
- 2. Should the abnormality be resected?

#### 2 | ANSWERS

- 1. Meckel's diverticulum.
- This Meckel's diverticulum requires resection because it is inflamed and has caused symptoms (abdominal pain and fever).

Meckel's diverticulum (MD) is a true diverticulum formed from the incomplete obliteration of the vitelline duct. It is harmless in the majority of cases but can become inflamed (like in our patient) and potentially perforate, or can cause bleeding or intestinal obstruction. Malignant MD (with carcinoid, leiomyosarcoma, adenocarcinoma, gastrointestinal stromal tumors, etc) is rare. The decision to resect the MD is straightforward when the patient is symptomatic and develops complication or when malignancy is suspected, but the dilemma is in cases where the

MD is incidentally found during investigation or surgery for another indication. The low incidence of malignancy in MD does not justify resection in all incidental cases. The morbidity and mortality rates of MD resection have been quoted at 8% and 1.2%, respectively, although the advances in surgery since the study was conducted have likely meant that these figures should be lower. Dumper et al suggested the decision to resect an incidental MD should be on a case-by-case basis: Besides the aforementioned indications, MD is resected when there is a visual or palpable abnormality of the MD where the surgeon is unable to rule out malignancy.<sup>2</sup>



**FIGURE 1** Meckel's diverticulum found during surgery. The diverticulum was six centimeters long and two centimeters wide. The diverticulum was inflamed

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2020 The Authors. Clinical Case Reports published by John Wiley & Sons Ltd

### **ACKNOWLEDGMENT**

All the medical staff involved in the management of this patient.

#### CONFLICT OF INTEREST

None declared.

#### **AUTHOR CONTRIBUTIONS**

RR: planning, writing, and reviewing the final draft of the manuscript; and was involved in the management of the patient.

#### ETHICAL APPROVAL

The patient consented to be included for the purpose of this article. Confidentiality was strictly adhered to.

#### ORCID

Razrim Rahim https://orcid.org/0000-0003-1016-9873

#### REFERENCES

- Soltero MJ, Bill AH. The natural history of Meckel's Diverticulum and its relation to incidental removal. A study of 202 cases of diseased Meckel's Diverticulum found in King County, Washington, over a fifteen-year period. Am J Surg. 1976;132(2):168-173.
- Dumper J, Mackenzie S, Mitchell P, Sutherland F, Quan ML, Mew D. Complications of Meckel's diverticula in adults. *Can J Surg*. 2006;49(5):353-357.

**How to cite this article:** Rahim R. Meckel's diverticulum and indications for resection. *Clin Case Rep.* 2020;8:3587–3588. <a href="https://doi.org/10.1002/ccr3.3297">https://doi.org/10.1002/ccr3.3297</a>