

Ileal Erosion from Migrated Hernioplasty Plug Mesh: A Rare Case of Recurrent Groin Abscess

Aspasia Papageorgopoulou¹, Nikoleta Koliou¹, Charalampos Seretis¹,
Aspasia Kapetanopoulou², Georgios Zacharis¹

¹Department of General Surgery, General Hospital of Patras, Greece, ²Department of Radiology, General Hospital of Patras, Greece

ABSTRACT

Hollow viscus erosion from intraperitoneally migrated mesh parts following hernia repair is an uncommonly encountered clinical entity. Herein, we present a rare case of distal ileum erosion from a migrated plug mesh, previously used in ipsilateral inguinal hernia repair, which manifested as a recurrent groin abscess.

Key Words: Mesh; erosion; abscess; infection

CASE PRESENTATION

A 68-year-old Caucasian male patient was assessed in the outpatient surgical clinic with symptoms of recurrent right groin abscesses. Clinical examination revealed the presence of a firm groin collection, with features of superficial erythema and sinus site, from which pus was discharging in low volumes. The patient had been previously submitted to multiple explorations of the abscess cavity under local anaesthetic in different hospital settings, resulting in temporary relief of his symptoms. His past medical history comprised hypertension, hyperlipidaemia, non-insulin dependent diabetes mellitus; he had also undergone laparoscopic appendicectomy and open mesh ipsilateral inguinal hernia repair two and five years ago, respectively. Due to the location of the abscess on the axis of the previous inguinal hernia incision and the recurrent nature of his symptoms, a chronic mesh infection was suspected.

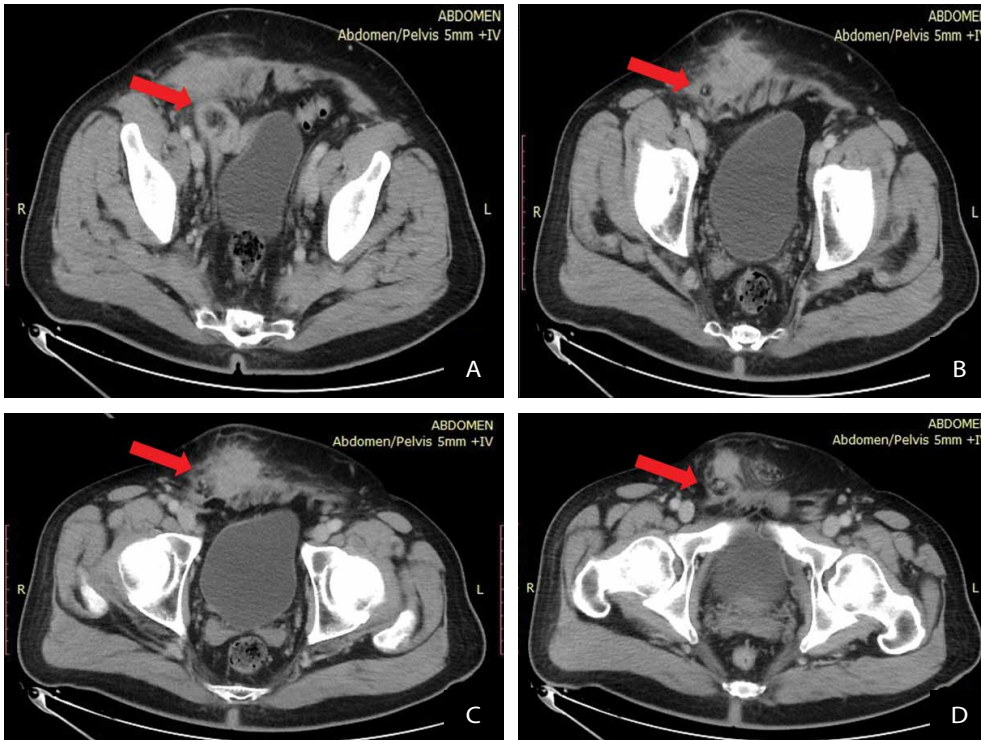
Corresponding author:

Charalampos Seretis, MSc, DU
Consultant General Surgeon, General Hospital of Patras,
Kalavryton 37 Str, 26332, Patras, Greece
Tel.: +30 6946165245, e-mail: babismed@gmail.com

Submission: 02.09.2023, Acceptance: 25.09.2023

Hence, an urgent computed tomography (CT) scan of the abdomen and pelvis was requested, revealing the presence of a 3.6x3.4cm collection at the anatomical area of the right internal inguinal ring, with inflammatory stranding of the overlying soft tissues, suggesting the presence of an infected meshoma from intraperitoneal mesh migration (Figures 1). After obtaining informed consent, the patient was taken to the operating theatre for exploratory laparotomy, with the intraoperative findings revealing erosion of the distal ileum from a migrated plug mesh, with presence of enterocutaneous fistula leading to the discharging groin sinus (Figures 2). The infected and displaced mesh was extracted and a limited ileal resection and primary anastomosis was performed to restore healthy bowel continuity. The groin wound and soft tissue sinus tract were curetted, irrigated and loosely packed in order to facilitate healing by secondary intention. The patient had an uneventful recovery and was discharged on the fourth postoperative day, remaining asymptomatic at three months' outpatient follow-up.

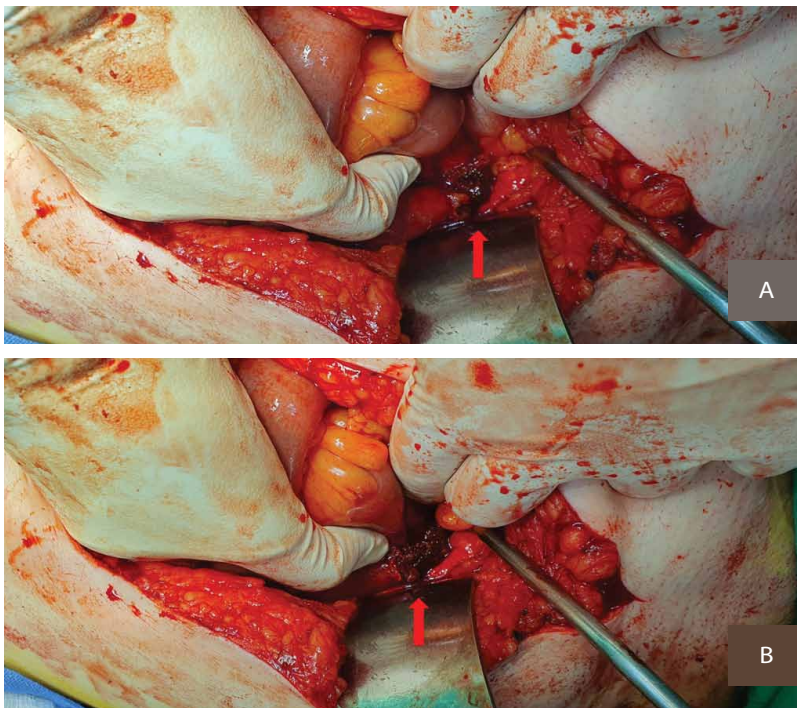
Although the use of plug & patch mesh remains popular amongst surgeons for inguinal hernia repair, the use of plugs is not recommended by most international hernia societies, with one of the relevant concerns be-



FIGURES 1. (A-D): Compilation of CT images demonstrating the infected meshoma from the migration of the plug mesh (red arrows indicating the infected meshoma and its tract).

ing its potential to migrate intraperitoneally and result in visceral erosion [1, 2]. In our case, the chronicity of the ileal erosion had resulted in a minimal output enterocutaneous fistula with a contained tract, however it could have equally resulted in a more complicated scenario,

should the large intestine have been eroded. Therefore, we strongly advocate the careful consideration regarding the use of mesh plugs in inguinal hernia repair, bearing in mind their minimal functional benefit and associated potential risks.



FIGURES 2. (A-B): Compilation of the intraoperative images, revealing the erosion of the distal ileum from the migrated mesh, involving one third of its circumference (red arrows indicating the migrated mesh and its erosion site).

Conflict of interest: *The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.*

Author contributions: *AP, NK, CS and AK: contributed to the clinical data collection and prepared the case report; AK and GZ: contributed to the design of the case report presentation and performed the final revision of the manuscript.*

Data availability statement: *The authors declare that the supporting data for this case presentation are presented within the manuscript.*

Informed consent: *Informed consent was obtained from the patient and is available upon request by the editorial office; no ethical committee approval was required for the publication of this case report.*

REFERENCES

1. Wu JF, Chen J, Hong F. Intestinal erosion caused by meshoma displacement: A case report. *World J Gastrointest Surg.* 2023 Jan;15(1):114-20.
2. HerniaSurge Group. International guidelines for groin hernia management. *Hernia.* 2018 Feb;22(1):1-165.