

Mesh-related complications and recurrence after incisional hernia repair in patients with fistulizing versus non-fistulizing Crohn's disease

Hans Lovén¹, Rune Erichsen^{2,3}, Anders Tøttrup⁴, Thue Bisgaard¹

¹ Centre for Surgical Science, Zealand University Hospital, Denmark. ² Department Clinical Epidemiology, Aarhus University Hospital, Denmark. ³ Department of Surgery, Randers Regional Hospital, Denmark. ⁴ Department of Surgery, Region Hospital Viborg, Denmark

Background

Patients with Crohn's disease (CD) often undergo abdominal surgery, increasing the risk of incisional hernia and mesh-related complications. This study examines whether fistulizing CD (FCD) is associated with higher risk of mesh-related complications than non-FCD.

Methods

Nationwide registry-based cohort study (2007–2016) of CD patients undergoing IHR. Outcomes were reoperation for mesh-related complications and hernia recurrence. Cumulative incidence and Cox regression were used to estimate risks.

Results

A total of 334 patients with CD (FCD=55, non-FCD=279) were included; 100% follow-up. Among the 279 non-FCD patients, 54 (19.4%) had isolated perianal fistulizing CD.

5-year reoperation risk for mesh-related complications was 1.5% for non-FCD compared with 30% for FCD patients (Figure 1), HR 15.95 (95% CI: 4.29–59.35). None of the patients with isolated perianal fistulizing CD had a reoperation for mesh-related complications.

The recurrence risk was 8.7%, with no significant difference (HR 1.06, 95% CI: 0.44–2.58) between the groups.

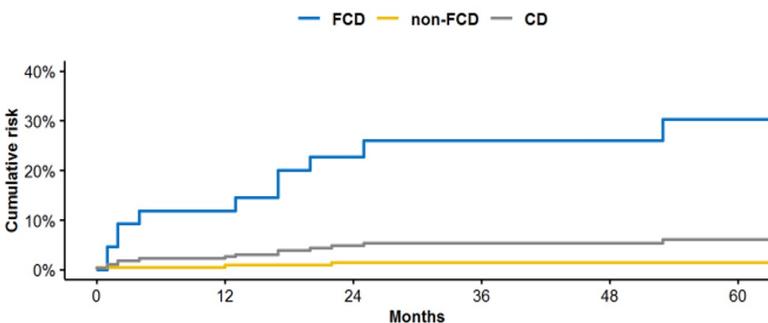


Figure 1. Cumulative risk of reoperation for mesh-related complications after incisional hernia repair with mesh in patients with Crohn's disease

Conclusions

FCD may be associated with higher rates of mesh-related complications compared with non-FCD, although larger studies are needed to confirm this finding. Conversely, isolated perianal fistulas do not appear to be associated with an increased risk of mesh-related complications after IHR.