

Incisional Hernia

Mesh Infection Following Abdominal Wall Reconstruction: Managing Disaster

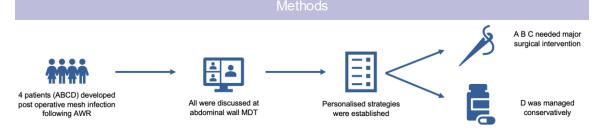
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Introduction

Abdominal wall reconstruction (AWR) often involves the use of mesh to reinforce structural integrity. While mesh implantation has significantly advanced hernia repair outcomes, postoperative mesh infection remains one of the most feared and challenging complications. These infections can result in prolonged hospital stays, multiple reoperations, and considerable morbidity. Despite its severity, there is no single standardised approach to managing infected mesh, and decisions must be tailored to the individual.

Objectives

This case series explores the complex landscape of managing mesh infection following abdominal wall reconstruction (AWR). We evaluate different strategies and their outcomes.



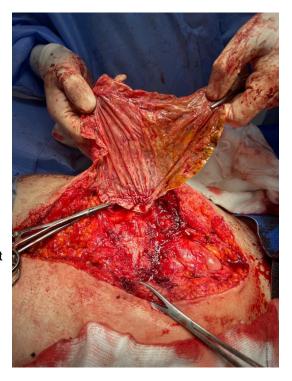
Results

Patient A, underwent repair of a midline and parastomal hernia with Phasix ST mesh. Wound dehiscence and subsequent infection required laparotomy, removal of mesh and negative pressure wound therapy (NPWT). They are currently being considered for final AWR.

Patient B developed recurrent infection after retro-rectal Prolene mesh repair. Despite repeat wound exploration and drainage of infection, mesh could not be salvaged. Definitive AWR with bridging mesh and component separation facilitated complete recovery.

Patient C presented with infected mesh and enterocutaneous fistula 9 years after onlay repair with Bard Composix mesh. He required mesh removal, fistula resection, and subsequent definitive AWR with bilateral retro-rectal repair, transverse abdominis release, and Phasix mesh placement achieving complete healing.

Patient D developed infected seroma following incisional hernia repair elsewhere with onlay Parietex mesh. Conservative management with antibiotics and NPWT allowed resolution.



Conclusions

Mesh infection is a hernia surgeon's nightmare, however with a considered personalised multidisciplinary approach disaster can be averted. This case series demonstrates how successful outcomes can be achieved in the most unlikely of patients.