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## Postoperative Infection Management Following Onlay Ventral Hernia Repair: Case Report and EHS Guideline Review



**Objective:** Onlay mesh repair is a commonly used technique for ventral hernia repairs, but the placement of the mesh in the subcutaneous plane increases the risk of surgical site infection (SSI). Effective postoperative infection management is essential to prevent complications related to the mesh. This case highlights the successful use of targeted antibiotherapy and negative pressure wound therapy (NPWT) for treating a postoperative seroma infection following an onlay ventral hernia repair.

**Method:** A 69-year-old woman with a history of multiple abdominal surgeries, including appendectomy, cholecystectomy, ectopic pregnancy, and prior ventral hernia repair (2023), presented with a large incisional hernia (EHS M2-W2, defect size 10 cm). She underwent adhesiolysis and onlay polypropylene mesh repair. Postoperative microbiological analysis revealed a seroma infection caused by *Staphylococcus aureus*. Initial management included systemic antibiotherapy, and NPWT was initiated due to persistent drainage.



### Conclusion

This case emphasizes the importance of early detection, targeted antibiotic therapy, and the use of NPWT in managing postoperative infections following onlay hernia repair. Adhering to the European Hernia Society (EHS) guidelines, alongside advanced wound care strategies, can improve surgical outcomes, reduce complications, and minimize the need for mesh explanation.

**Results:** On postoperative day 10, signs of local infection prompted wound drainage and culture analysis. NPWT facilitated granulation tissue formation, leading to progressive wound healing. By day 90, cultures were negative for bacterial growth, confirming infection resolution, and the patient achieved complete wound healing without recurrence.

