

## HERNIAS, MESH REPAIRS AND INFECTIONS

### Background

Hernia repairs are considered a “routine” procedure in the United States, but the field of hernia repair has changed dramatically in the past decade.

- Conventional method
  - interrupted sutures
  - Mayo technique
- Mesh repair
  - significantly reduced recurrence rate
- Laparoscopic mesh repair
  - even lower recurrence rate
  - lower infection rate

### Mesh repairs

- various types of mesh
  - preformed polypropylene mesh plug
  - flat mesh rolled into a cylindrical plug
  - Prolene hernia system

Studies on these techniques have reported very low recurrence rates ranging from 0% to 2%.

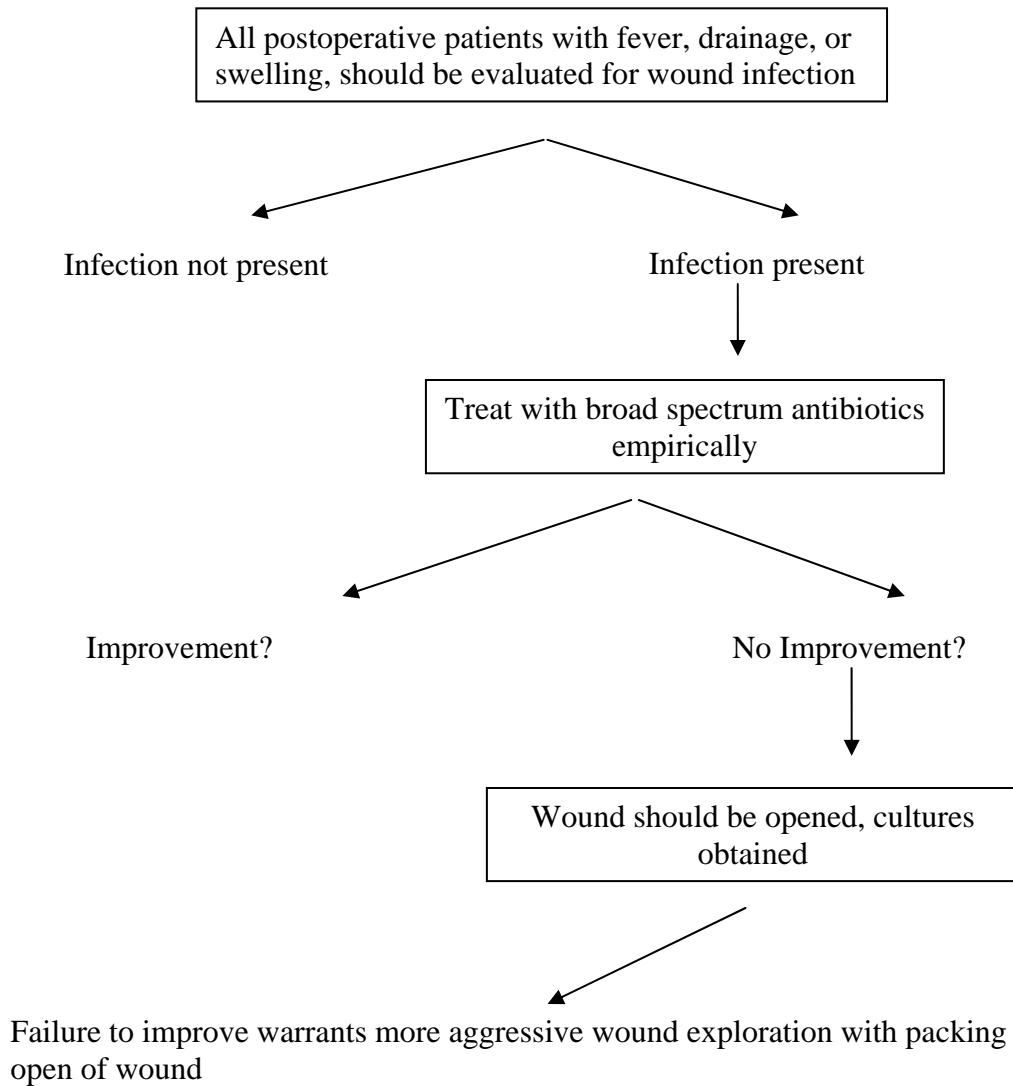
### Antibiotic prophylaxis

- usually single dose IV ampicillin and sulbactam
- pooled studies reported, at most, a 1 – 2% not statistically significant improvement with antibiotic prophylaxis

### Infections

- reported rates of infection following open mesh hernia repair range from 0 – 9%, but this is questionable due to an inconsistent definition of clinically relevant infection
- bacteria involved are typically skin flora, such as *Staphylococcus aureus* and *Staphylococcus epidermis*, or may be from anaerobic bowel flora including *Bacteroides fragilis* and *Echerichia coli*
- incidence of mesh infection in laparoscopic repair is demonstrably less than with open approach. This is due to:
  - introduction of the mesh through trocars
  - avoiding skin contact
  - mesh placement far from the trocar incision

## Management of Mesh Repair Infection



### **When does mesh within infected surgical site need to be removed?**

Retrospective case studies suggests that mesh may be preserved in most cases following exposure and drainage of the wound

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