



Open mesh repair is more effective than open suture repair for incisional hernia

Clinical question	What is the best available open operative technique for incisional hernias?
Bottom line	Open mesh repair has a lower failure rate (recurrence) than open suture repair (NNT* 5 to 17), but mesh repairs are complicated by more wound infections (NNH** 12). *NNT = number needed to treat to benefit one individual. **NNH = number needed to treat to cause harm in one individual.
Caveat	Six trials yielded insufficient evidence as to which type of mesh or which mesh position (below or above the fascia) should be used. In all the studies, the suture repairs were inadequately described in terms of the different possibilities in direct closure technique. Furthermore, recurrence was not objectively defined and was generally diagnosed by clinical examination rather than through imaging techniques.
Context	Incisional hernias occur in 10 to 23 per cent of patients after abdominal operations.1 The recurrence rate following open suture repair may be as high as 54 per cent2 and as high as 32 per cent for open mesh repair.3 Several conditions are associated with the development of incisional hernia: suture technique, wound infection, increased abdominal wall tension and metabolic connective tissue disorder, specifically abdominal aortic aneurysms.4
Cochrane Systematic Review	Den Hartog D et al. Open surgical procedures for incisional hernias. Cochrane Reviews 2008, Issue 3. Article No. CD006438. DOI: 10.1002/14651858. CD006438.pub2. This review contains 7 trials involving 1141 participants.
PEARLS 101, October 2008, written by Brian R McAvoy	

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