A meta-analysis examining the use of fibrin glue mesh fixation versus

suture mesh fixation in open inquinal hernia repair. [Review]

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Publication Date: 2014

Abstract:

BACKGROUND: The aim of this study was to systematically analyze the randomized trials

comparing fibrin glue mesh fixation with suture mesh fixation in open inguinal hernia repair.

METHODS: Information was collected from a literature search using PubMed, Springer, Cochrane

Library database and reference lists. The methodological quality of included publications was

evaluated. Statistical analysis was performed using Review Manager Version 5.2.5 software.

RESULTS: Nine articles were identified for inclusion: four randomized controlled trials (RCTs) and

five prospective observational clinical studies. All the trials were considered to be of fair quality. The

results showed that there was a lower incidence of chronic pain (RR 0.42, 95% CI 0.22-0.79, I(2)

11%; p < 0.01), and hematoma/seroma (RR 0.43, 95% CI 0.21-0.87, I(2) 0%; p < 0.05) in the fibrin

glue mesh fixation group. However, the results of meta-analysis revealed that the incidence of

recurrence or urinary problems between the two procedures were similar.

CONCLUSIONS: During the 6-15 months follow-up, fibrin glue mesh fixation is a feasible alternative

for mesh fixation with sutures in open inguinal hernia repair. However, the poor quality of the

included trials limits the evidence; rigorously designed trials are warranted to confirm this

conclusion.

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