

The clinical effectiveness and cost-effectiveness of open mesh repairs in adults presenting with a clinically diagnosed primary unilateral inguinal hernia who are operated in an elective setting: systematic review and economic evaluation

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Plain English summary

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What was the problem/question?

A hernia (rupture) occurs when there is a weakness in the muscles of the tummy (abdomen). The abdominal contents may push through under the skin and appear as a swelling or a lump. Inguinal hernias (hernias in the groins) are very common and are repaired by surgery. Most repairs involve the placement of a 'mesh' in the abdominal wall through open surgery (e.g. Lichtenstein repair, preperitoneal repair). Lichtenstein repair, where the mesh is fixed to the edges of the 'rupture' in the posterior wall of the inguinal canal, is one of the most popular techniques for inguinal hernia repair. Recurrences are usually low, but chronic pain has been reported after Lichtenstein repair. The position of the mesh is probably important. The open preperitoneal repair, where the mesh is placed in the preperitoneal space and held in place with intra-abdominal pressure, has shown similar results but there is no consensus regarding the best surgical operation.

What did we do?

We assessed the consequences and costs of the open preperitoneal repair versus the Lichtenstein repair in people with unilateral (on one side) inguinal hernia.

What did we find?

We found 12 clinical studies (1523 participants). People who underwent the open preperitoneal repair returned to work and usual activities earlier than those who underwent the Lichtenstein repair. In general, the open preperitoneal repair was associated with fewer episodes of pain, fewer recurrences and fewer complications than the Lichtenstein repair and was also less costly.

What does this mean?

The open preperitoneal repair represents an alternative to the Lichtenstein repair for the treatment of inguinal hernia.

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