

# Hughes abdominal closure versus standard mass closure to reduce incisional hernias following surgery for colorectal cancer: the HART RCT

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## Plain English summary

### The HART RCT

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## Plain English summary

**B**owel cancer treatment involves surgery for the majority of patients. A complication of this surgery is the formation of a hernia at the site of the incision in the abdominal wall, known as an incisional hernia. The lining of the abdomen, fat or the intestine can squeeze through the gap and form a lump under the skin. An incisional hernia can form any time after surgery and can cause serious complications and pain, and can also affect the patient's quality of life.

Surgery to correct incisional hernias is not always successful, so finding a way of preventing them is important. This research compares the traditional way of sewing up the abdomen, where the two sides are brought together in one layer with a continuous thread, with an alternative method called the Hughes abdominal closure method/Hughes repair. In the Hughes repair, a series of horizontal and vertical stitches are arranged to spread the load and ease the tension across the wound.

A total of 802 patients from 28 sites in the UK were recruited to the trial. Half of the patients were randomly allocated to have traditional abdominal closure and half were randomised to have Hughes abdominal closure. All were followed up for 1 year after surgery to assess whether or not an incisional hernia had occurred. We also assessed quality of life during follow-up, and we compared the costs and benefits of each procedure to see which option was the better value for money.

By comparing the results from the two methods, it was hoped that the best method of abdominal closure to reduce the risk of an incisional hernia occurring would be found. The analysis of the data suggested that the risk of an incisional hernia was no different with either closure method. Furthermore, Hughes abdominal closure was more expensive and provided less value for money than standard abdominal closure.

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