

# Surgical Education and Self-Assessment Program (SESAP)

Category 1, Item 10

## Question

A 52-year-old manual labourer has a right inguinal hernia that is easily reducible. Which of the following statements about open mesh (tension-free) repair compared with laparoscopic repair is TRUE?

- A Return to work is independent of type of repair and should be possible 1 week after operation.
- B The risk of recurrence is greater with laparoscopic repair.
- C Operative time is usually shorter for laparoscopic repair.
- D Pain is less for open tension-free repair.
- E The 2 repairs have similar overall complication rates.

## Critique

Choice of technique to repair groin hernias expanded when laparoscopic hernia repair was developed in the 1990s. Controversy continues as to which is the best repair.

Many outcomes have been used to measure the success of the different techniques, including return to work, operative time, postoperative pain and recurrence rates. It appears that patients return to work after a minimum of 9 days, regardless of the type of repair. Although several studies indicate that return to work is more rapid after laparoscopic repair, other studies show that return to work is more a function of employment status (self-employed versus workers' compensation, for example) than choice of repair. Some studies show that operative times are not significantly different between the 2 repairs, whereas others report longer times for the laparoscopic repair. Although pain is reportedly less for laparoscopic repair, the data are still open to question because some of the studies include tension-producing repairs in the comparative arm. Although 1 large study showed laparoscopic repair to have a lower recurrence rate than open, very few tension-free repairs were performed in that study. Recurrence rates after open tension-free repair range from <1% to 10%, and a randomized study of open tension-free versus laparoscopic tension-free repair with sufficient sample size and long-enough follow-up has yet to be published. The 2 repairs appear to have similar overall complication rates.

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## Bibliography

1. Barkun JS, Keyser EJ, Wexler MJ, Fried GM, Hinchey EJ, Fernandez M, et al. Short-term outcomes in open vs. laparoscopic herniorrhaphy: confounding impact of worker's compensation on convalescence. *J Gastrointest Surg* 1999;3(6):575-82.
2. Barkun JS, Wexler MJ, Hinchey EJ, Thibeault D, Meakins JL. Laparoscopic versus open inguinal herniorrhaphy: preliminary results of a randomized controlled trial. *Surgery* 1995;118(4):703-9, discussion 709-10.
3. Liem MS, van der Graaf Y, van Steensel CJ, Boelhouwer RU, Clevers GJ, Meijer WS, et al. Comparison of conventional anterior surgery and laparoscopic surgery for inguinal-hernia repair. *N Engl J Med* 1997;336(22):1541-7.
4. Payne JH Jr, Grininger LM, Izawa MT, Podoll EF, Lindahl PJ, Balfour J. Laparoscopic or open inguinal herniorrhaphy? A randomized prospective trial. *Arch Surg* 1994;129(9):973-9, discussion 979-81.
5. Wright DM, Kennedy A, Baxter JN, Fullarton GM, Fife LM, Sunderland GT, et al. Early outcome after open versus extraperitoneal endoscopic tension-free hernioplasty: a randomized clinical trial. *Surgery* 1996;119(5):552-7.

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