ConvaTec | Ostomy Care

No Consensus on Restrictions on Physical Activity to Prevent Incisional Hernias After Surgery

Objectives

The purpose of this study was to evaluate the impact of post-surgery physical activity restrictions for colorectal cancer patients and assess agreement among surgical specialists regarding these restrictions.

Conclusion

The results highlight a general disagreement on whether restrictions on physical activity should be recommended to patients after colorectal surgery. As there is no evidence linking activity restrictions and hernia prevention, recommendations are based on personal preferences.

What This Could Mean for Clinical Practice

- Physical restrictions may severely impair patients' quality of life and slow their postoperative recovery. This study found no consensus on the extent of restrictions on physical activity recommended to patients after colorectal resection. Clinical studies in this area would be beneficial to aid in the construction of clinical guidelines.

Authors and Publication

Pommergaard HC, Burcharth J, Danielsen A, Angenete E, et al. **No Consensus on Restrictions on Physical Activity to Prevent Incisional Hernias After Surgery**. *Hernia*. 2014;18(4):495-500

At a Glance:

- 2014 study
- Questionnaire
- Danish and Swedish study

Background

Early post-laparotomy wound failure is an important factor for the development of incisional hernias. Because of this, surgeons commonly recommend physical activity restrictions to their patients after colorectal surgery to prevent poor wound and fascia healing and incisional hernias. However, there is limited evidence supporting those postoperative restrictions on physical activity reduce incisional hernias. Restrictions such as these may be counterproductive to fast-track surgery and may conflict with the patients' need and/or wish to resume everyday life and work activities.

Methods

In collaboration with the Scandinavian Surgical Outcomes Research Group (SSORG), a questionnaire was sent by e-mail to 60 Danish and Swedish consultant-level colorectal surgeons with academic affiliations and a high volume of colorectal cancer resections. To ensure respondents would fully understand questionnaires, they were developed in collaboration with four colorectal specialists and validated by three additional specialists. The case-based questionnaire was constructed to identify surgical procedures (open or laparoscopic surgery) and accompanying restrictions recommended by surgeons to their patients. Potential risk factors for hernia were also explored, including: if the patient had a stoma, was severely overweight, smoked heavily, receiving steroid treatment or had other risk factors.

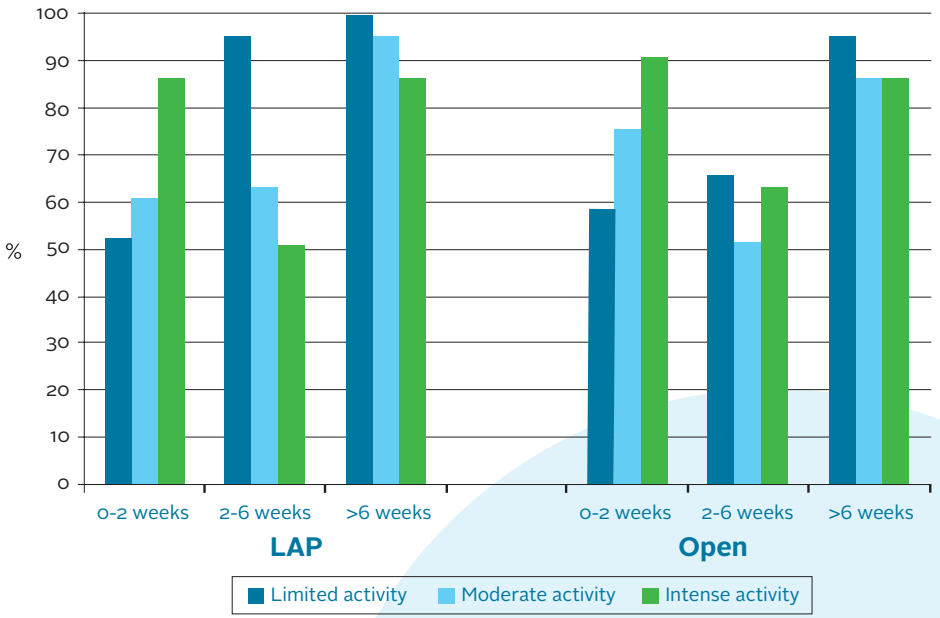
Results

A response rate of 68.3% was achieved with the receipt of 41 completed questionnaires.

Amongst the 41 surgeons, the number of restrictions recommended was different and more restrictions were recommended for open compared with laparoscopic surgery.

The probability that two randomly chosen specialists agreed on whether post-surgical activity restrictions should be recommended was generally low for the first two time periods (0–2 and 2–6 weeks). However, at greater than six weeks, there was a high level of agreement for all degrees of activity.

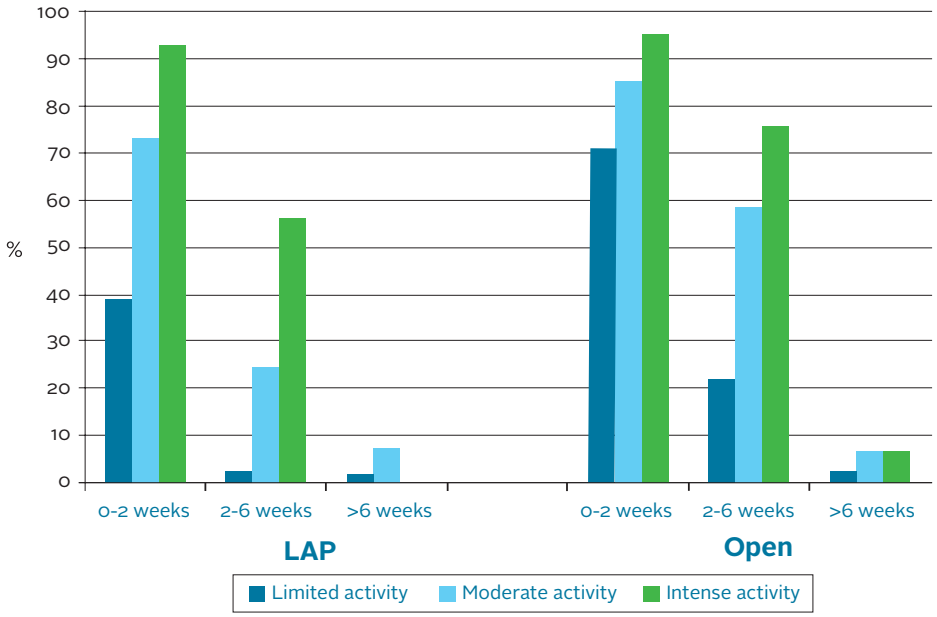
Restrictions on activity - Probability of second opinion agreement (%)



The number of restrictions recommended in total (all time periods together) was significantly different between the specialists both with regard to open (p\0.0005) and laparoscopic surgery (p\0.0005).

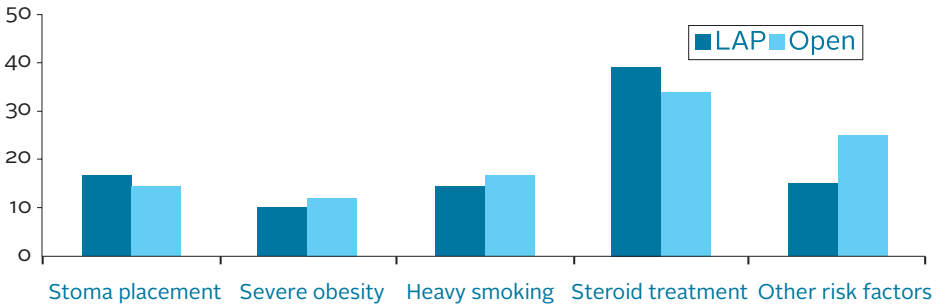
The percentage of specialists recommending restrictions on physical activity after laparoscopic or open surgery was significantly different (below graph). Generally, most restrictions were recommended by the specialists in the earliest time period (0–2 weeks), with a gradual decrease seen in the subsequent two periods (2–6 and >6 weeks).

% of specialists giving restrictions



Generally, few specialists (9.8–39 %) would change their restrictions in the presence of other risk factors; however, regarding steroid treatment, 16 out of 41 (39 %) would do so.

% of specialists changing restiction in presence of a risk factor



Limitations

This was an opinion-based study, and the sample size was limited.