# Return to work after hernia repair

# Gabriella Grech, Gordon Caruana Dingli

### **Abstract**

Background: The development of mesh repairs and the introduction of laparoscopic techniques have decreased recurrence rates of inguinal hernia and made the return to usual activities faster. Provided the surgery is uncomplicated and the patient does not need to lift more than 10kg at work, it appears safe to encourage a return to work soon after surgery.

Methods: The study involved obtaining data of patients that had open, primary unilateral elective inguinal hernia repair surgery from January to June 2015. These patients were operated by all the surgical firms working at Mater Dei Hospital and all were performed by experienced specialists. 100 patients were interviewed over the phone.

Results: Age of patients ranged from 20 to 84 years with a median age of 65 years. The majority of patients were males (90%). 43% of patients were given information about return to work after hernia repair by a senior doctor where 51% advised to return to work 6 weeks after hernia repair. 69% of patients adhered to the advice that they were given. 39% of self-employed patients returned to work earlier than advised as opposed to 26.3% of employed who returned to work before advised.

# **Key words**

Herniorraphy, Return to Work, Inguinal

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#### Introduction

With the introduction of mesh repairs and laparoscopic techniques, patients undergoing inguinal hernia repair have been returning to their usual activities earlier than before. Moreover, recurrence rates after inguinal hernia repair have decreased significantly.<sup>1</sup>

In the past, these patients were advised to spend a long period of bed rest after inguinal hernia repair, to ensure an uneventful recovery. In 1890, Bassini recommended 6 weeks of bed rest followed by a prolonged period of recovery.<sup>2</sup> In the 1940s, strict bed rest for 3 weeks was advised, followed by a convalescence of 9 weeks, in spite of the fact that research had already demonstrated that early return to usual activities had no harmful effects on recovery post-inguinal hernia repair.<sup>3-4</sup>

The most common approach for inguinal hernia repair adopted at our local hospital is still the open inguinal hernia mesh repair. The recovery process following inguinal hernia mesh repair involves 2 phases. Initially, the mesh is kept in place only by the strength of sutures that are used to secure the mesh during surgery (first phase). Then, eventually, the tissue around the mesh starts growing and fixes the mesh into place (second phase).

Therefore, advice regarding activity after inguinal hernia mesh repair depends on the time it takes for the tissue to grow around the mesh and imparts stability as well as the force that is required to prevent the sutures and in-growth of tissue to provide support to the mesh repair. Less force is required to disrupt mesh repair during the first few days post-operatively as the recovery is still in the first phase.

Several studies have shown that patient may return to usual activities of daily living as soon as they are comfortable. With regards to return to work after inguinal hernia mesh repair, patients should be advised to return to work after 1 to 2 weeks in case of little or no lifting requirements at work; 2 to 4 weeks in cases where lifting does not exceed 10 kg and 6 to 8 weeks in cases where lifting exceeds 10kg.<sup>4-6</sup>

#### **Original Article**

#### Methods

The study involved obtaining data of all the patients that had open primary unilateral elective hernia repair surgery from January to June 2015. This data was obtained after Clinical consultants, Ethics Committee and the Data Protection Officer approved the study and gave permission to use the data.

Hundred patients were contacted *via* phone and were asked the following questions:

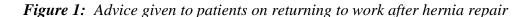
- Age
- Date of Surgery
- What information was given pre-operatively regarding return to work after hernia repair?
- Who gave you the information?
- When did you feel comfortable carrying out activities of daily living?
- When did you return to work after surgery?
- What is your job?
- Are you employed, self-employed or unemployed?

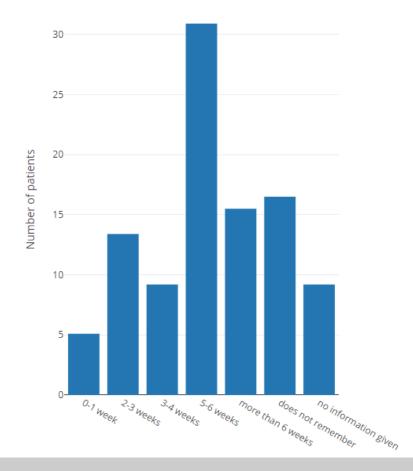
Patients who had emergency surgery, bilateral hernia repair and recurrent hernia repair, as well as laparoscopic hernia repair were excluded from the study. From the 100 patients contacted 3 underwent emergency surgery so they were excluded from the study.

#### **Results**

This study includes 97 patients who underwent elective open inguinal hernia repair. Age ranged from 20 to 84 years with a median age of 65 years. The absolute majority of interviewed patients were male, 87 patients (90%) while 10 patients (10%) were female.

The patients mentioned a lot of different sources of information regarding return to work after hernia repair. This included nurses, junior and senior doctors including consultants. There was a case where the patient relied on his family as the source of information while another one was given a leaflet of information with no explanation. No information was given to 9% of patients (9 patients), while 8% (8 patients) did not remember what advice they had been given at the time of questioning. (Figure 1)





# **Original Article**

In most cases (43% of patients), a senior doctor explained to the patients about the procedure and information about post-operative care and return to work. Different advice was given to the patients where 31% (30 patients) were advised to return to work after 5-6 weeks, 16% (15 patients) were advised to return to work after more than 6 weeks, 13% (13 patients) were advised to return to work after 2-3 weeks, 9% (9 patients) were advised to return after 3-4 weeks and 5% (5 patients) were advised to return to work after 1 week.

Patients who were given advice by nurses were advised to return to work after inguinal henia repair after more than 6 weeks in 58% of patients (11patients) while 16% (3 patients) were advised to return to work after 2-3 weeks and 4-5 weeks. Similar advice was given by doctors (excluding consultants) where 51% (23 patients) were advised to return to work after more than 6 weeks, 16% (7patients) were advised to rest for 2-3 weeks, 11% (5 patients) were advised to return to work after 1 week, 9% (4 patients) were advised to return to work after 4-5 weeks and 13.3% (6 patients) do not remember the information given by doctors (excluding consultants). Those patients who were given advice by their consultant were advised to return to work after more than 6 weeks in 43% (6 patients), 2-3 weeks in 29% (4 patients), 4-5 weeks in 14% (2 patients). No patients were advised to return to work by their consultant after 1 week while 2 patients (14%) do not remember the information.

The majority of the patients interviewed were retired so 60 patients (62%) did not return to work after hernia repair which included retired and unemployed patients. Taking into consideration, the rest of patients, 51%% (19 patients) returned to work after more than 6 weeks, 24% (9 patients) returned to work after 2-3 weeks, 19% (7 patients) returned after 4-5 weeks and 5% (2 patients) returned after 1 week.

The majority of patients did not return to work as advised by health care professionals as 21.6% (8 patients) returned to work before expected while another 27% (10 patients took more time to recover after inguinal hernia repair than expected (Figure 2).

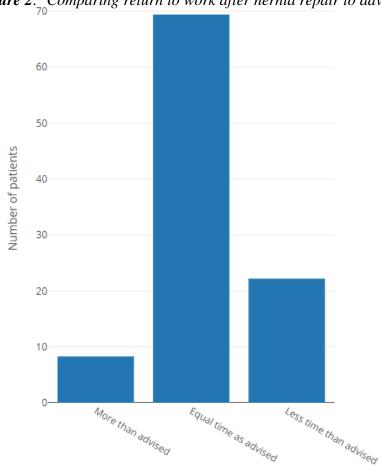


Figure 2: Comparing return to work after hernia repair to advice given

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When taking into consideration self-employed patients 38.9% (7 patients) took less time to return to work than advised, 33.3% (6 patients) took more time to return to work than advised while 27.7% (5 patients) took the same amount of rest after hernia repair as advised. Regarding employed patients 47.3% (9 patients) took the advice given and returned to work at the same time they were advised to while 26.3% (5 patients) took less time of rest than advised and more time to return to work respectively.

Regarding patients who carry out manual work (73% of employed patients), 37% (10 patients) returned to work as per advice given, 33.3% (9 patients) took longer to recover than advised while 29.6% (8 patients) returned to work before the time they were advised to. When taking into consideration patients with office work (27% of employed patients), 50% (5 patients) returned to work as per advice given, 30% (3 patients) returned to work earlier than advised while 20% (2 patients) returned to work later than advised.

#### **Discussion**

professionals.

Advice regarding surgery and return to work after hernia repair should be given by the surgeon carrying out the surgery. Unfortunately, in some cases this job was delegated to junior doctors and/or nurses. In some cases information was not given at all. One patient mentioned that he was given a leaflet with relevant information. It would be a good idea to give out such leaflets following an explanation so that the patients would have a point of reference later on.

Most of the patients follow the advice given by health care professionals so it is important that accurate information to avoid complications or unnecessary time off work. Most patients were advised to return to work 6 weeks after hernia repair with little difference between consultants, doctors and nurses. This seems excessive and it is possible that although some patients were fit for work they took unnecessary time off work to follow the advice given. The majority of patients interviewed were retired, which is consistent with the mean age of 65. Self-employed patients returned to work earlier than advised when compared to employed patients. There was no difference in return to work between manual and office workers. Both adhered to the advice given by the healthcare

The patient information leaflet currently used at the local hospital advises patient to return to work after 2 weeks in the case of office work and 4 weeks in the case of manual work. This information is consistent with advice provided by literature review. This study shows that most health care professionals are not aware of this information and thus provide inaccurate information to the patients.

#### Conclusion

In conclusion, return to work after hernia repair should not follow a one-size-fits-all approach. It is mainly determined by the patient's occupational duties and individual pain experience.<sup>2</sup> Self-employed patients are found to return to work faster.<sup>3</sup> Pre-operative expectation of time off work is a significant factor in prolonged convalescence.<sup>4</sup>

The authors propose better awareness on the time required to recovery after inguinal hernia repair so that accurate information is given to the patient. Explanation to the patient should be accompanied by information leaflet so that the patient would have the opportunity to read further about his/her procedure. Moreover, this information should be repeated on discharge and included in the discharge letter.

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