

When to return to work after groin hernia repair

A. Martín Duce *, F. Arrieta, E. Tobaruela, R. Villeta, J.M. Mugüerza,
F. Noguerales

Service of General Surgery, Príncipe de Asturias University Hospital, Alcalá de Henares, Madrid, Spain

Received 31 July 1999; accepted 9 September 1999

Abstract

Inguinal herniorrhaphy is one of the most common operations conducted in general surgery. A questionnaire was prepared to ascertain the opinions of surgeons and general practitioners (GPs) about the recommended postoperative time-off work following inguinal herniorrhaphy and the factors that influence this decision. Questionnaires were sent to GPs of nine of the eleven Health Areas of Madrid and 262 Services of General Surgery in Spain. Both groups were influenced by factors that had nothing to do with a greater recurrence rate. An education programme geared at reducing long periods of unnecessary convalescence is required. © 2000 Elsevier Science B.V. All rights reserved.

Keywords: Time-off work; Inguinal herniorrhaphy

1. Introduction

Inguinal hernia repair is one of the most common operations conducted in general surgery. The immobilization period following inguinal herniorrhaphy has been reduced significantly throughout the 20th century, from the original 6 weeks mandated by Bassini [1] to the current standard of immediate mobilization. Despite this, the recovery time, as measured by the mean ‘time-off work’, has not been significantly shortened.

In spite of improvements in suture materials and the development of synthetic prostheses, general practitioners (GPs) as well as surgeons seem to subscribe to the erroneous idea that a prolongation of the convalescence time is an insurance against failure.

Following Baker’s study [2], carried out in the UK, we prepared a survey to find out the pattern of conduct most prevalent amongst surgeons and GPs with respect to the post-operative period. It also aimed to deduce the factors that influence doctors in their dealings with the ‘time-off work’ dilemma.

2. Patients and methods

Between December 1996 and February 1997 a questionnaire was sent out to all GPs ($n = 1420$) in nine health areas of Madrid and to 262 services of general surgery, both public and private, distributed throughout the country. The questionnaire contained the following questions:

1. Following an uneventful primary unilateral inguinal hernia repair in a male between 18 and 65 years of age, how many days off work do you recommend?
2. Do any of the following factors influence you when deciding the time-off work you recommend?
 - 2.1. Type of hernia repair (unilateral/bilateral; direct/indirect).
 - 2.2. Use of the mesh.
 - 2.3. Patient’s physical activity at work (heavy/moderate/light).
 - 2.4. Experience of the surgical staff (consultant/resident).
 - 2.5. Type of patient’s employment (self-employed or working for others).
 - 2.6. Patient’s desire to extend or reduce the recommended period off work.
3. Are you the one who usually signs the medical discharge for these patients?

* Corresponding author. Present address: Alcalde Luis Silvela 4, 2A., 28022 Madrid, Spain. Tel.: +34-91-3203958; fax: +34-91-8801825.

E-mail address: martinduce@alehop.hop (A. Martín Duce)

3. Results

The group of GPs returned a total of 434 questionnaires giving a response rate of 32.7%. From the group of surgeons, 500 questionnaires pertaining to 89 services of general surgery were returned: a response rate of 34%.

The mean 'time-off work' recommended by the GPs was 25 (range 7–68) days. In the surgical group this time was 27 (range 6–60) days.

Physical activity at work (98.5%), bilateral herniorrhaphy (74%) and the use of a prosthesis (53%) were the three factors with the greatest influence on the group of GPs. Only physical activity (94%) and bilateral herniorrhaphy (62%) were factors that influenced the prolongation of the convalescence period in more than 50% of surgeons (Table 1).

Though there exist numerous statistically meaningful differences between the groups, due to the minimal percentages of influence (< 30%) of numerous factors, only the differences in the type of hernia and in the patient's physical activity are worthy of emphasis (Table 1).

Only 28% of surgeons admitted being responsible for signing medical discharge papers for these patients, as against 85% in the group of GPs.

4. Discussion

There are many authors who consider that the risk of recurrence is not influenced by any of the previously mentioned factors (type of hernia, physical activity, type of surgery...) [3,4] or by 'time-off work' [5,6]. The musculo-aponeurotic tissue and the suture material are the two factors responsible for the resistance of the wound in the immediate post-surgery period [7,8]. On the other hand, the new prosthetic materials, by guaranteeing an extreme biocompatibility and ensuring the disappearance of tension in the repair zone of the hernia, make them equally suitable for patients with dystrophic tissues (recurrent hernia, old age). Likewise, they are suitable for highly active persons (athletes) or for those who need to return to work as early as possible (self-employed).

The level of understanding of these considerations will determine whether longer or shorter recovery periods are prescribed for each patient. This has important economic and social consequences because of the great number of hernia repairs carried out each year in any country [9].

Questions 1 and 2 of the questionnaire were posed to find out if the performance of both groups was in accordance with the consensus of specialists in hernia repair. It merits emphasis that only 1.5% of GPs and 4% of surgeons were not influenced by any factor and that physical activity at work was the one factor that influenced both groups the most. It can be established that the end of the convalescence period is dictated by the moment when patients can undertake their habitual physical activity in a comfortable way. According to Gilmore [10], this time falls between 1 and 4 weeks postoperatively, being individualized for each patient. However, our study demonstrated that more than 60% of physicians from both groups were not influenced by the patients' desires to shorten their convalescent period. Also, it is important to note that 85% of GPs were responsible for signing the patients' medical discharge papers. It is there where the importance of this group falls and this warrants greater reflection.

Similar results were found by Jarrett [11] in Oxford though in this study the time recommended by the GPs was twice that recommended by the consultants.

Although, the attitude of GPs shows a trend that leads to a reduction in the convalescent period in line with surgical thinking [12], we found that both groups were highly influenced by factors that had nothing to do with greater recurrence rates.

An intensive education programme aimed at reducing the present unnecessary long periods of post-operative convalescence following hernia repair is required.

Table 1
Influence of different factors in the time-off work after inguinal hernia repair

| Influencing factors | General practitioners (n = 434) | Surgeons (n = 500) | Probability |
|----------------------------------|------------------------------------|-----------------------|-------------|
| <i>Type of hernia</i> | | | |
| Uni or bilateral | 320 (74%) | 317 (62%) | <0.001 |
| Direct or indirect | 133 (31%) | 64 (13%) | <0.001 |
| <i>Use of prosthesis</i> | 231 (53%) | 233 (47%) | <0.005 |
| <i>Physical activity at work</i> | 428 (98.5%) | 470 (94%) | <0.001 |
| <i>Self-employed or not</i> | 54 (12%) | 114 (23%) | <0.001 |
| <i>Surgical experience</i> | 36 (8%) | 82 (16%) | <0.001 |
| <i>Patient's desire</i> | | | |
| To extend the time-off work | 95 (22%) | 102 (20%) | 0.63 |
| To reduce the time-off work | 176 (40%) | 229 (46%) | 0.12 |

References

- [1] Bassini E. Uber die Behandlung des Leistenbruches. *Arch Klin Chir* 1890;40:429–34.
- [2] Baker DM, Rider MA, Fawcett AN. When to return to work following a routine hernia repair: are doctors giving the correct advice? *J R Coll Surg Edinb* 1994;39:31–3.
- [3] Barwell NJ. Recurrence and early activity after groin hernia repair. *Lancet* 1981;2:985.
- [4] Taylor EW, Dewar EP. Early return to work after repair of unilateral inguinal hernia. *Br J Surg* 1983;70:599–600.
- [5] Illes JDH. Convalescence after herniorrhaphy. *J Am Med Assoc* 1972;219:385–8.
- [6] Ross APJ. Incidence of inguinal hernia recurrence. *Ann R Coll Surg Engl* 1975;57:326–8.
- [7] Lichtenstein IL, Herzikoff S, Shore JM, et al. The dynamics of wound healing. *Surg Gynecol Obstet* 1970;130:685–90.
- [8] Devlin HB, Rusell IT, Muller D, et al. Short stay surgery for inguinal hernia. *Lancet* 1977;1:847–9.
- [9] Bourke JB, Taylor M. The clinical and economic effects of early return to work after elective inguinal hernia repair. *Br J Surg* 1978;65:728–31.
- [10] Gilmore OJA. How long do patients convalesce after inguinal herniorrhaphy: current principles and practice. *Ann R Coll Surg Engl* 1993;3:289–95.
- [11] Jarrett MED. Pre-operative advice given by general practitioners and consultants to patients concerning return to work. *Ann R Coll Surg Engl* 1998;80(Suppl):171–3.
- [12] Cannon SR, Ralphs DNL, Bolton JP, et al. Early discharge following hernia repair in unselected patients. *Br J Surg* 1982;69:112–3.