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ASPECTS OF TREATMENT*

Incidence of inguinal hernia recurrence

Effect of time off work after repair

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Summary

A survey of 260 adult male patients who had undergone inguinal hernia repair was carried out to see how long they stayed off work after operation. There was no evidence that a prolonged convalescent period reduced the subsequent hernia recurrence rate.

Evidence from the North American literature suggests that patients can resume their usual physical activity without ill effect much sooner after operation than is the current practice in the United Kingdom. General practitioners should be informed of the advice that has been given to their patients about the resumption of physical activities after operation.

Introduction

'How long should I stay off work, doctor?' This must be one of the most common questions that a surgeon or general practitioner hears from patients who have recently undergone an operation. It was my ignorance of the correct answer to this question from a patient who had recently undergone a hernia repair that led me to carry out the survey described in this paper.

Group studied

The survey was confined to adult male patients undergoing repair of inguinal hernias at St Bartholomew's and the Whittington Hospitals, London. Shortly after they had been discharged from hospital the patients were asked the following questions: What was your occupation before operation? Have you returned to the same occupation and, if not, what is your new occupation? How soon after the day of your operation did you return to light work? How soon after your operation did you return to full work? The patients were then classified into 3 groups—light work (for example, retired, clerical work), medium work (for example, shopkeepers, sales representatives), and heavy work (for example, labourers, welders, butchers)—according to the work being done after the operation.

Approximately 4 years later the patients were contacted again and were asked if they had developed a recurrent hernia. If they were in any doubt they were examined by a doctor.

Results

Of the 260 patients studied, 29 underwent bilateral inguinal hernia repair, giving a

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total of 289 hernias in the study.

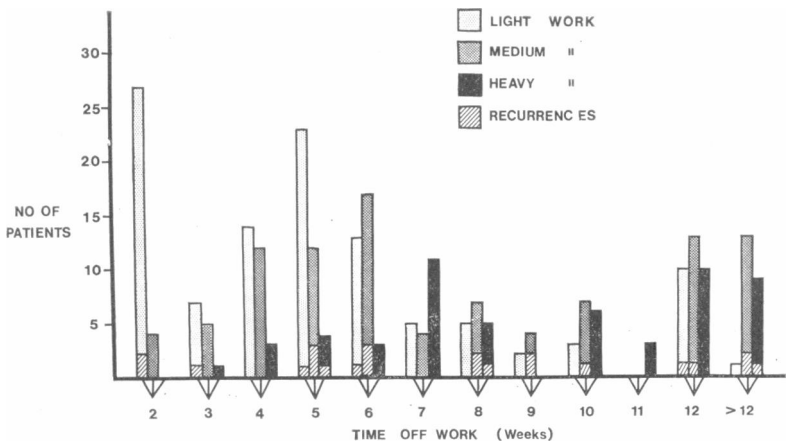
The number of hernias which had recurred 4 years after repair was 22. Of 152 indirect hernias, 6 recurred (3.9%). Of 92 direct hernias, 7 recurred (7.6%). Of 45 hernias that were recurrent at the initial operation, 9 recurred (20%). This difference in the incidence of the recurrence rate in different types of inguinal herna is similar to that found in the literature on the subject.

There was no apparent correlation between the recurrence rate and the methods of hernia repair used during the study. However, the most significant finding was that there was no correlation between the time off work after operation and the subsequent development of a recurrent hernia. This applied whether the patient returned to light, medium, or heavy work (see figure).

There was little correlation between the time a patient spent off work after operation and the advice given by the consultant under whose care he had been admitted. There was a tendency for patients who were self-employed to return to work sooner than advised. A managing director and a consultant haematologist both returned to full work on the 5th postoperative day with no untoward sequelae. Two butchers who returned to full work at 4 weeks did not develop recurrent hernias, yet this is an occupation which involves lifting heavy weights. On the other hand many patients remained off work for an extraordinarily long time without apparent reason. Striking examples of this tendency were a 47-year-old civil servant with a sedentary job who had an indirect hernia repair and then did not return to office work for another 7 weeks and did no gardening until 3 months had passed; a 20-year-old bank clerk with an indirect hernia who returned to light work after 8 weeks but did not do any heavy work for over 4 months; and a 54-year-old bank messenger who had an indirect hernia repair and returned to light work after 8 weeks and to full work after 14 weeks. It would seem from personal communication with a number of general practitioners that only rarely does the hospital discharge letter state what advice has been given to the patient with regard to his return to work.

Discussion

This survey has shown that prolonged time off work does not reduce the incidence of recurrence after hernia repair and that early return to work does not increase the risk of hernia recurrence. There is evidence in the literature from North America, where the



Relationship between hernia recurrence and time off work after inguinal hernia repair in adult males.

social security system is less bountiful, strongly supporting the idea that patients should return to work much earlier than is the current practice in the United Kingdom. Surgery at the Shouldice Clinic in Ontario is confined almost exclusively to the repair of inguinal hernia, and since 1945 over 50 000 patients have been operated on there with a recurrence rate of less than 1%[1]. Iles[2] has described the technique used at this clinic. The repair is carried out routinely under local anaesthesia and the patient is helped to walk back to his bed and is discharged from hospital after 72 h. He is encouraged to resume immediately all activities that can be carried out in reasonable comfort and is expected to have resumed his previous level of activity by the 4th postoperative week. Piano-movers, stevedores, and lumberjacks are advised to wait 4 weeks before returning to full work. National Hockey League players are advised to avoid competitive ice hockey for 4 weeks, but Iles quotes the example of one NHL ice hockey star who resumed practice skating after 7 days without ill effect. Lichtenstein *et al.*[3] showed that a healing wound at 8 weeks possesses only 40% of intact-tissue strength, whereas a wound repaired with a non-absorbable suture immediately possesses 70% of intact-tissue strength and this degree of strength is still present at 8 weeks. They reported a hernia recurrence rate of less than 1% in 1000 patients who were encouraged to take unrestricted physical activity immediately after operation.

Conclusion

The evidence from the survey described above shows that many patients restrict their postoperative activities after inguinal hernia repair for much longer than is necessary.

It is suggested that these patients should be advised to resume their normal activities immediately after discharge from hospital and should remain off work for up to 4 weeks only if they are engaged in occupations which are physically very strenuous. The advice given to patients should be included in the discharge letter from the hospital to the general practitioner.

Action based on these conclusions would have a significant effect on the economy of the United Kingdom.

I should like to thank the general surgeons of St Bartholomew's and the Whittington Hospitals under whose care the patients were admitted for allowing me to carry out the study.

These findings have been presented previously to the Section of Surgery of the Royal Society of Medicine as a short paper.

References

1 Maingot, R (1974) *Abdominal Operations*, 6th edn, vol. 2, p. 1502. New York, Appleton-Century-Crofts.

2 Iles, J D H (1972) *Journal of the American Medical Association*, 219, 385.

3 Lichtenstein, I L (1970) *Surgery, Gynecology and Obstetrics*, 130, 685.