

**OCCUPATIONAL MEDICINE**

# Fitness for work after surgery

Occupational physician **Dr Tony Williams** and **Dr Sarah Maxted** continue our series with a discussion of fitness for work after surgery

This article will consider some of the issues surrounding fitness for work after surgery and the factors that affect individual patients. Detailed guidance on specific operations and their expected return to work times can be found at [www.workingfit.com](http://www.workingfit.com), on the Royal College of Surgeons' website,<sup>1</sup> and on the Royal College of Obstetricians and Gynaecologists' website.<sup>2</sup>

**Advising patients**

Advising patients on how much time is needed off work after surgery can be difficult. One study found that GPs' recommendations for time off heavy lifting work following hernia repair ranged from two to 13 weeks, while surgeons' recommendations ranged from one to 12 weeks. But evidence showed that open prosthetic mesh repair can withstand any degree of stress immediately<sup>3</sup> and post-operative activity does not need to be restricted at all.

Despite this, clinicians' recommendations are the most important factor in determining a patients' length of absence from work,<sup>4</sup> so if you recommend 12 weeks off, the patient is likely to take 12 weeks off. On the other hand, one study followed up patients after discectomy who were advised to return to full activities as soon as possible.<sup>5</sup> The mean duration of absence was 1.7 weeks and none developed any complications as a result.

Unnecessary time off unpaid can have a serious effect on a household budget. Also, after weeks of rest, many patients will never regain full fitness. Evidence suggests that many doctors recommend an unnecessarily long time off work, so it is important to consider whether work could be adjusted during recovery instead.

**Assessing fitness for work**

The issues to consider when assessing fitness for work after surgery can be broadly divided into three categories: capability, safety and motivation.

**Capability**

Can the patient get out of bed and get to work? Can they cope with work, and what can they physically manage? For many people, work is actually physically less demanding than living at home, and – provided they can get to work – they are capable of working.

**Safety**

Will patients be harmed or potentially cause harm to others by going to work or by



walking plaster after a couple of weeks, while a proximal osteotomy may require non-weight bearing for six weeks.

**Diabetes**

During the initial healing phase, endothelial cells need to mobilise for revascularisation. This is inhibited in diabetes – in some cases, catastrophic wound failure and dehiscence occurs, and in other cases there is failure or delay of complete healing.

Diabetes also affects the immune system and the resulting macrophage dysfunction leads to reduced clearance of dead cells and persistent inflammation.

**Obesity**

Overexpression of tumour necrosis factor by adipose tissue leads to a state of chronic low-level inflammation, interfering with wound healing and exacerbating symptoms during the healing process.

Obesity is also linked to impaired antibody responses and increased risk of chest infections.

**Smoking**

Smoking has a profound adverse effect on healing. Carbon monoxide and hydrogen cyanide reduce oxygenation of the blood. Nicotine impairs angiogenesis and so further reduces oxygen supply to the wound.

Smoking also impairs collagen production and maintenance, weakening any scar formation – smokers have four times the risk of incisional hernia of non-smokers. It is important to explain this to patients awaiting surgery.

**Age**

Counterintuitively, age has only a minimal effect on recovery times. Recovery takes only an additional one or two days overall between ages 18 and 65.

Most of the delays seen in recovery in older patients are caused by comorbidities.

**Dr Tony Williams** is a consultant occupational physician at Medway Maritime NHS Foundation Trust and medical director of Working Fit Ltd  
**Dr Sarah Maxted** is a medical student at King's College London

The faculty of occupational medicine sets standards for specialists and also seeks to support GPs who are working part-time in occupational medicine or have an interest in work and health as it affects their patients. The diploma in occupational medicine, taken by many GPs, covers the effects of work on health, assessment of fitness for work, health surveillance, rehabilitation, workplace visits, ethics and the law. For further details on the diploma, other training and careers, and for more information on occupational medicine for GPs, visit [www.facoccmed.ac.uk](http://www.facoccmed.ac.uk).

**Coming up in this series** Occupational mental health, dermatitis work-related upper limb disorder and working in occupational health

**References**

- 1 The Royal College of Surgeons. Patient information. *Get well soon*. 2012. [www.rcseng.ac.uk/patient\\_information/get-well-soon](http://www.rcseng.ac.uk/patient_information/get-well-soon)
- 2 Royal College of Obstetricians and Gynaecologists. Patient information. *Return to fitness: recovering well*. 2011. [www.rcog.org.uk/recovering-well](http://www.rcog.org.uk/recovering-well)
- 3 Amid PK, Shulman AG and Lichtenstein IL. Critical scrutiny of the open 'tension-free' hernioplasty. *Am J Surg* 1993;165:369-71
- 4 Ratzon N, Scheiter-Margalit T and Froom P. Time to return to work and surgeons' recommendations after carpal tunnel release. *Occupational Medicine* 2006;56:46-50
- 5 Carragee EJ, Helms E and O'Sullivan GS. Are post-operative activity restrictions necessary after posterior lumbar discectomy? A prospective study of outcomes in 50 consecutive cases. *Spine* 1996;21:1893-7

**PULSE Learning****1 CPD hour**

**P** Go online to complete this CPD module for a suggested 1 credit. This module will be available free to all members of Pulse Learning until 28 March 2012  
► [pulse-learning.co.uk](http://pulse-learning.co.uk)