OCCUPATIONAL MEDICINE

Work-related upper limb disorders

Dr Steven Ryder, consultant occupational physician, discusses these common complaints

The Health and Safety Executive estimates that work-related upper limb and neck complaints affect 146 per 1,000 adults per year, resulting in 4.7 million lost working days per year.

Recently, there has been some confusion and controversy surrounding these conditions. The term repetitive strain injury has justifiably fallen into misuse, as the term ‘injury’ is not always true and implies fault. Work-related upper limb disorder is an umbrella term for conditions thought to be caused by exposure in the workplace. These include well-defined syndromes such as tenosynovitis, carpal tunnel syndrome and epicondylitis, and the non-specific, less well-defined syndrome of non-specific diffuse forearm pain. These can also all have causes other than work.

Diagnosis

Diagnosis is usually made on history and examination. The diagnostic criteria for these are well recognised, and key tests include:

- Finkelstein’s test: Positive when ulnar deviation of the wrist with the fingers flexed over the thumb placed in the palm produces pain over the distal radius and radial side of the wrist. This suggests De Quervain’s tenosynovitis.
- Tinel’s test: Positive when tapping over the carpal tunnel causes tingling in the thumb and radial two and a half fingers. Points to carpal tunnel syndrome
- Phalen’s test: Also for carpal tunnel syndrome, in Phalen’s test both hands are held tightly and palm-press opposite to a prayer position, creating at least a 90° angle between forearm and hand. It is positive if numbness and tingling are produced when the position is held for about 30 seconds.
- Oman’s test: Patient holds his hand in supination and drops his hand. Antalgia is positive for radial tunnel syndrome.

Nerve conduction studies are useful for confirming carpal tunnel syndrome. Other conditions to consider include rheumatoid arthritis, diabetes and trauma.

Management and prognosis

Analgescics and NSAIDs are, of course, useful in managing all of these conditions.

Shoulder conditions

These usually respond to physiotherapy and steroids. Surgery may be useful if conservative measures don’t help. Frozen shoulder can last 12 to 18 months.

Epicondylitis

This is treated with physiotherapy. Local steroid injection may be beneficial early on – but recurrence rates are high. High-frequency ultrasound, exercise therapy and ultrasound are also effective. Surgery can be successful in resistant cases. These conditions are self-limiting and some patients improve within one year – with or without treatment – but a majority still have symptoms after this. Recurrence is more common in manual workers.

Tenosynovitis

Patients with tenosynovitis should avoid aggravating movements. Topical anti-inflammatory agents can be useful, as can intra-articular injection of steroids and local anaesthetics. Splitting is often recommended, but prolonged use can cause muscle pain and weakness.

Surgical decompression usually successfully relieves symptoms of carpal tunnel syndrome.

Posture, reduce forces and repetition
- employee training
- job rotation to reduce time at a repetitive task
- an induction programme to enable a new employee to work at a slower rate initially
- rest breaks to allow recovery time
- rehabilitation of affected workers
- redeployment if the above measures aren’t effective.

The role of the GP

It is important to identify the potential that the disorder may be associated with work – although you can’t firmly establish causation until a workplace risk assessment has been carried out. Treatment alone without workplace modification is likely to be ineffective. I recommend the following approach:

- Establish the anatomical diagnosis.
- Consider work-related risk factors by asking the patient what they do at work in functional terms.
- Exclude recreational risk factors.
- A short break from work may be beneficial, although I wouldn’t advise a long time off. Using the fit note (Med 3), suggest to the employer that work may be a factor and recommend a workplace risk assessment.

Many employers have access to occupational health specialists. If not, you can contact the local Health and Safety Executive officer.

Patients may be keen for you to write ‘RSI’ on the sick note – but I would avoid doing this, saying something like: ‘We tend not to use this term any more.’ If you think that the disorder may be caused by factors at work, it is more useful to call it work-related upper limb disorder rather than something vague such as ‘forearm pain’ – but prompt the employer to investigate.

A recent literature review highlighted that:

- Early return to work is important, though some work may be difficult to perform for a while. Work should be comfortable and accommodating.
- Upper limb disorders can be triggered by everyday activities and over-attribute to work can be detrimental to recovery.
- Many cases settle with self-management and this should be encouraged, though some need treatment. Intervention should take a stepped approach.

The Health and Safety Executive provides useful resources, including a risk assessment worksheet, guidance for using display screens and a booklet for employers who run small businesses – download these from pulsetoday.co.uk/tools-and-resources.

References

3 The Health and Safety Executive. hse.gov.uk (accessed 10 April 2012)

Further reading

2 Healthy Working UK. healthyworkinguk.co.uk (accessed 10 April 2012)

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 to work, evaluation of workplace risk assessments, 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 fem.ac.uk/education/education-for-GPs.