Non-specific forearm pain

An overview of best practice

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ACC Review 47

- Non-specific forearm pain is characterised by diffuse pain in the absence of discernable pathology. It has historically been labelled with various terms including 'cumulative trauma disorder', 'overuse syndrome', 'repetitive strain injury' and 'occupational overuse syndrome'.
- A strict biomedical model of pain cannot sufficiently explain the condition.
- Certifying the patient as unfit for work may bring about short-term relief; however, this approach does not address the underlying factors involved and merely postpones symptoms. Additionally it can reinforce beliefs that work is harmful and may create or worsen employer-employee relationship difficulties.
- In the absence of an identifiable clinical condition such as a tenosynovitis, ACC's legislative cover requirement for a physical injury to be present is not fulfilled.

Background

Non-specific forearm pain (NSFP) is defined as pain in the forearm in the absence of a specific diagnosis or pathology[1]. At present, NSFP is a symptom-based definition.

Causal theories for NSFP remain unsubstantiated and inadequately researched. It is clear, however, that a strict biomedical model of pain cannot sufficiently explain the condition[2]. NSFP belongs to a spectrum of pain conditions that includes complex regional pain syndrome, fibromyalgia and irritable bowel syndrome amongst others[3].

Risk factors

The prevalence of clinically diagnosed NSFP amongst the general population is likely to be less than one percent. Cases are more likely to be: females, white-collar workers, smokers, and individuals with a previous history of hand/wrist fractures[4]. Additionally, the condition is associated with high levels of psychological distress but not with physical factors such as repetitive movements.

Presentation

A range of symptoms has been described, including aching, tiredness, cramp, weakness, tremor, loss of function, numbness, paraesthesias, allodynia (a painful response to a usually non-painful stimulus such as light touch), and subjective feelings of swelling.

Diagnosis

NSFP is characterised by diffuse pain in the absence of discernable pathology. Additional features that may be present include allodynia, cramp, weakness and muscle tenderness. Primary health care providers should establish an early diagnosis of NSFP from the synthesis of information derived from the patient history and clinical presentation.

An important facet of the clinical examination is the exclusion of other musculoskeletal disorders. A methodical approach is suitable, starting with the neck (cervical radiculopathy) and progressing down through the shoulder (impingement, frozen shoulder) elbow (epicondylitis, ulnar nerve entrapment), and wrist (tenosynovitis, carpal tunnel syndrome).

Specific pain disorders such as complex regional pain syndrome (look for oedema, changes in skin blood flow, abnormal sweating, allodynia) and fibromyalgia (pain predominantly axially but also affecting upper and lower limbs with fatigue) should also be explicitly considered during screening.

Where a primary health care provider is considering a diagnosis of NSFP they should openly discuss their perception of the diagnosis with the patient. There is a risk of iatrogenesis through indiscriminate diagnostic imaging investigation.

Management

There is an absence of research investigating the initial management of NSFP. Primary health care providers may consider adopting the following general framework[5,6].

1. Acknowledgement of the presence of symptoms and the high level of discomfort that can be experienced.
2. Screen for 'red flags' (neurological deficit, joint swelling, vascular changes, age >55 or <15, systemic symptoms).
3. Consider the presence of any specific diagnoses and, if present, initiate specific treatment.
4. Identify physical factors associated with the development of specific musculoskeletal conditions, including: high rates of repetition; prolonged abnormal postures; and high force requirement.
5. Identify psychosocial factors that may be of relevance as both risk factors and obstacles to recovery, including: individual maladaptive illness beliefs, depression or psychological distress; and work-relevant issues such as monotonous work, poor control over work factors, high work demands and workplace organisational issues.
6. Reassure the patient that there is no damage evident and that continuing to work (with provisional task modification as appropriate) and be active is not going to cause any damage.
7. Encourage the patient to continue working and not take sick leave.
8. Modification activition (provisional): liaising with the patient's workplace is important, as is considering the need for an assessment of the ergonomics of the workplace. Ergonomic assessment does not refer simply to considering only the immediate layout and use of a workstation, but should also include the psychological and social factors in the environment in which they work and live.
9. Prescribe regular, simple analgesics as needed for symptom control, as a course rather than on demand.
10. Undertake a seven-day review.

Where psychosocial factors have been identified as a significant barrier to recovery and/or when there is a failure to respond as expected, health care providers should consider referring a patient with NSFP to a specialised multidisciplinary rehabilitation programme early in the clinical management process. When access to a multi disciplinary unit is not readily available, referral to a psychologist with experience in pain management should be considered.

Some practitioners manage symptoms by certifying patients as unfit for work. Although this may bring about short-term relief, this approach does not address the physical, psychological or interpersonal factors involved and merely postpones symptoms. Additionally it can reinforce beliefs that work is harmful and create or worsen employer-employee relationship difficulties. Having certified a patient as unfit for work, it can then prove challenging to change tack and certify the patient as fit for work on their next presentation.

There is both an absence of research on the natural history of NSFP, and an absence of knowledge concerning prognostic factors that may impact on the clinical recovery of patients diagnosed with NSFP.

Issues of relevance to ACC

ACC receives many claims where forearm symptoms are clearly related to work exposures, however in the absence of an identifiable clinical condition such as tenosynovitis, the legislative cover requirement for a physical injury to be present is not fulfilled. Tenosynovitis should not be diagnosed in the absence of tenderness and objective swelling that is not anatomically associated with the course of a tendon and/or crepitus; where these symptoms are not present, a diagnosis of NSFP would be more appropriate.

References

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