key points

SELECTED BY

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Complex regional pain syndrome (CRPS) is a chronic debilitating painful condition comprising unremitting pain, sensory, sudomotor, vasomotor and motor abnormalities in the affected extremity. The incidence is 26 per 100,000 population per annum. This is similar to trigeminal neuralgia and more common than multiple sclerosis. It has a peak incidence in the 55-75 age group and there is an association with asthma and migraine. CRPS is three times more common in women than men.

CRPS should be suspected in any patient presenting with persistent pain in an extremity beyond the expected period of tissue healing following an acute injury, sprain, fracture or surgical procedure. Severe pain in a glove or stocking distribution is the predominant symptom in more than 90% of cases. The differential diagnosis is wide and there is no single test or investigation that can conclusively confirm what is essentially a clinical diagnosis.

The International Association for the Study of Pain diagnostic criteria were deemed to lack specificity and were replaced by the current Budapest criteria in 2004. First, there must be continuing pain disproportionate to the inciting event. Second, the patient must report symptoms in three out of four categories. On examination, there must be evidence of signs in two of the same four categories. Finally, there must be no other diagnosis that could account for the presentation.

The approach to managing patients with CRPS is multifaceted and a multidisciplinary approach is required. Criteria for referral to specialist services are: to confirm the diagnosis or exclude alternatives (pain clinic, neurology, rheumatology); to exclude ongoing pathology warranting intervention (e.g. orthopaedics for non-union or suspected infection); when symptoms are proving difficult to manage (pain clinic); to address functional rehabilitation (pain clinic, specialist pain physiotherapist). Patients should be referred urgently to the local pain service to allow prioritisation before a downward spiral of loss of function, depression and worsening pain ensues.

For symptom control, paracetamol and anti-inflammatories are recommended in the first instance, with the addition of a first-line antineuropathic agent (e.g. duloxetine, amitriptyline, gabapentinoids) if this fails. Topical agents have the advantage of localised action with reduced systemic side effects and are an attractive option in those intolerant of first-line antineuropathic agents or those vulnerable to side effects (the elderly; those with co-existing renal or hepatic impairment). Topical lidocaine 5% plasters and capsaicin 0.075% cream have both been used successfully in CRPS, although the evidence is limited to case reports. They are worth trialling while awaiting specialist input and generally well tolerated. It is prudent to warn patients regarding the initial burning and pruritus that can occur with capsaicin and to reassure them that this generally subsides after several days' use.