

THE IMPORTANCE OF A MULTIDISCIPLINARY APPROACH IN MANAGING COMPLEX REGIONAL PAIN SYNDROME (CRPS) - CASE REPORT

Josip Ljoka, Jan Aksentijević, Matea Stiperski Matoc, Katarina Doko Šarić, Dubravka Bobek

Dubrava University Hospital, Croatia
e-mail: josip_ljoka@hotmail.com

Background

Complex regional pain syndrome (CRPS) is a chronic pain condition marked by sensory, motor, autonomic, and trophic disturbances, typically following injury or surgery. Diagnosis is clinical, as no definitive test exists. The Budapest Criteria is the most widely accepted tool, requiring ongoing pain disproportionate to the inciting event, at least one symptom in all four categories (sensory, vasomotor, sudomotor/edema, motor/trophic), and at least one clinical sign in two or more categories. Other potential diagnoses must be excluded. A multidisciplinary approach is essential for effective CRPS management. The rehabilitation medicine specialist typically leads the care team, prescribes medication, and monitors progress. Physiotherapists play a key role by employing range of motion exercises to restore joint mobility, lymph drainage to reduce edema, and desensitization techniques to address hypersensitivity. Occupational therapy focuses on improving hand function and enhancing independence in daily tasks. Educational rehabilitation includes sensory stimulation and hand-strengthening exercises using various therapeutic tools. Nurses support the process by encouraging treatment adherence, monitoring symptoms, and providing emotional support.

Case report

A 48-year-old nurse developed CRPS type I after sustaining a fourth metacarpal fracture from a fall at home. Following immobilization, she experienced worsening pain, swelling, and arm discoloration. Her wrist was diffusely edematous with a bluish hue, and she reported severe pain (VAS 9), weakness, and forearm paresthesia. Joint stiffness and restricted movement in the wrist and fingers prevented her from forming a fist, with a 7 cm gap from the palm. She fulfilled the full Budapest Criteria for CRPS. Her individualized, multidisciplinary treatment included analgesics, corticosteroid injections, vitamin supplementation, physiotherapy (lymph drainage, myofascial release), occupational therapy, and educational rehabilitation.

Conclusion

After several weeks, she showed significant improvement in pain, strength, and mobility. Her recovery highlights the importance of early diagnosis and a coordinated, patient-centered approach in CRPS management.

Keywords: Rehabilitation, Pain, CRPS, Fractures, Analgesics