Journal of Chitwan Medical College 2024;14(48):1
Available online at: www.jcmc.com.np

EDITORIAL

OROFACIAL CRPS (COMPLEX REGIONAL PAIN SYNDROME)

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*DOI:*https://doi.org/10.54530/jcmc.1540

Complex regional pain syndrome (CRPS) has been described in the literature as a difficult-to-treat, painful syndrome with an evolving clinical picture. Its pathophysiology is controversial and poorly defined which involves multiple mechanisms.[1,2] Few mechanisms play a central role including exaggerated and disproportionate neurogenic inflammation, dysfunction of the autonomic nervous system and central nervous system (CNS) neuroplasticity. CRPS is traditionally divided into two types: CRPS type I and II.[3] Two new subtypes have been added recently, "CRPS with Remission of Some Features" and "CRPS not otherwise specified (NOS)".[4]

This orofacial syndrome can develop after any injury involving local tissue, most commonly after events such as difficult dental procedures, trauma with sharp/blunt instruments, any orofacial surgery, or any systemic illness.[2] It can present within days to weeks or even months after precipitating event. The clinical presentation varies from classic neuropathic pain to the involvement of local sympathetic, vascular and motor systems. CRPS is difficult to diagnose and treat and, revised IASP 2012 criteria should be followed.[4] Inadequate response to oral medications coupled with the complex pathophysiology of CRPS may lead to slower progression and eventual late presentation of sympathetic overactivity along with vasomotor, sudomotor and motor system involvement fulfilling the diagnostic criteria later in the disease course.[1] Persistent sensory symptoms accompanied by inadequate response to medications, frequent change in treatment, and the psychological profile of the patient might contribute to enhanced peripheral and central sensitization leading to altered sympathetic nervous system function, brain plasticity with the widening of the receptive field and altered somatosensory perception.[1]

Sympathetic nerve blocks (SNB) are commonly used for both diagnosing and treating CRPS and are clinically effective for orofacial pain.[3,5] Sympathetic nerve blocks preferred for orofacial CRPS is either stellate ganglion or sphenopalatine ganglion blocks. These pain interventions help manage pain, restore function, and offer a less painful window for recovery.[3] There is no specific treatment approach and current guidelines recommend a systematic interdisciplinary management approach which includes pharmacological treatment, physical, occupational, and psychotherapy and sympathetic nerve blocks aiming towards functional restoration by addressing the syndrome's medical, psychological and social aspects.[3,6] Due to low prevalence and previously non-uniform diagnostic criteria, CRPS treatment guidelines are unfortunately not adequately backed by high-quality, double-blinded, randomized controlled trials. Evidence-based treatment consensus based on available literature are proposed as guidelines for the condition.[3]

REFERENCES:

1. Bruehl S, Warner DS. An Update on the Pathophysiology of Complex Regional Pain Syndrome. Anesthesiology. 2010;113(3):713-25. [DOI]
2. Santos ELW, Sales IS, Asano NMJ, Coriolano MDGWDS. Complex regional pain syndrome in the orofacial region. Case report. Braz J Pain. 2018;1(4). [DOI]
3. Harden RN, Oaklander AL, Burton AW, Perez RS, Richardson K, Swan M, et al. Complex Regional Pain Syndrome: Practical Diagnostic and Treatment Guidelines, 5th Edition. Pain Med. 2022;23(Supplement_1):S1-S53. [DOI]
4. Goebel A, Birklein F, Brunner F, Clark JD, Gierthmühlen J, Harden N, et al. The Valencia consensus-based adaptation of the IASP complex regional pain syndrome diagnostic criteria. Pain. 2021;162(9):2346-8. [DOI]
5. Melis M, Zawawi K, al-Badawi E, Lobo Lobo S, Mehta N. Complex regional pain syndrome in the head and neck: a review of the literature. J Orofac Pain. 2002 Spring;16(2):93-104. [PMID]
6. Kalladka M, Alhasan H, Morubagal N, Noma N, Khan J. Orofacial complex regional pain syndrome. J Oral Sci. 2020 Sep 26;62(4):455-457.[DOI]