



COMPLEX REGIONAL PAIN SYNDROME FOLLOWING AORTIC DISSECTION: SUCCESSFUL MANAGEMENT WITH LUMBAR SYMPATHETIC BLOCK

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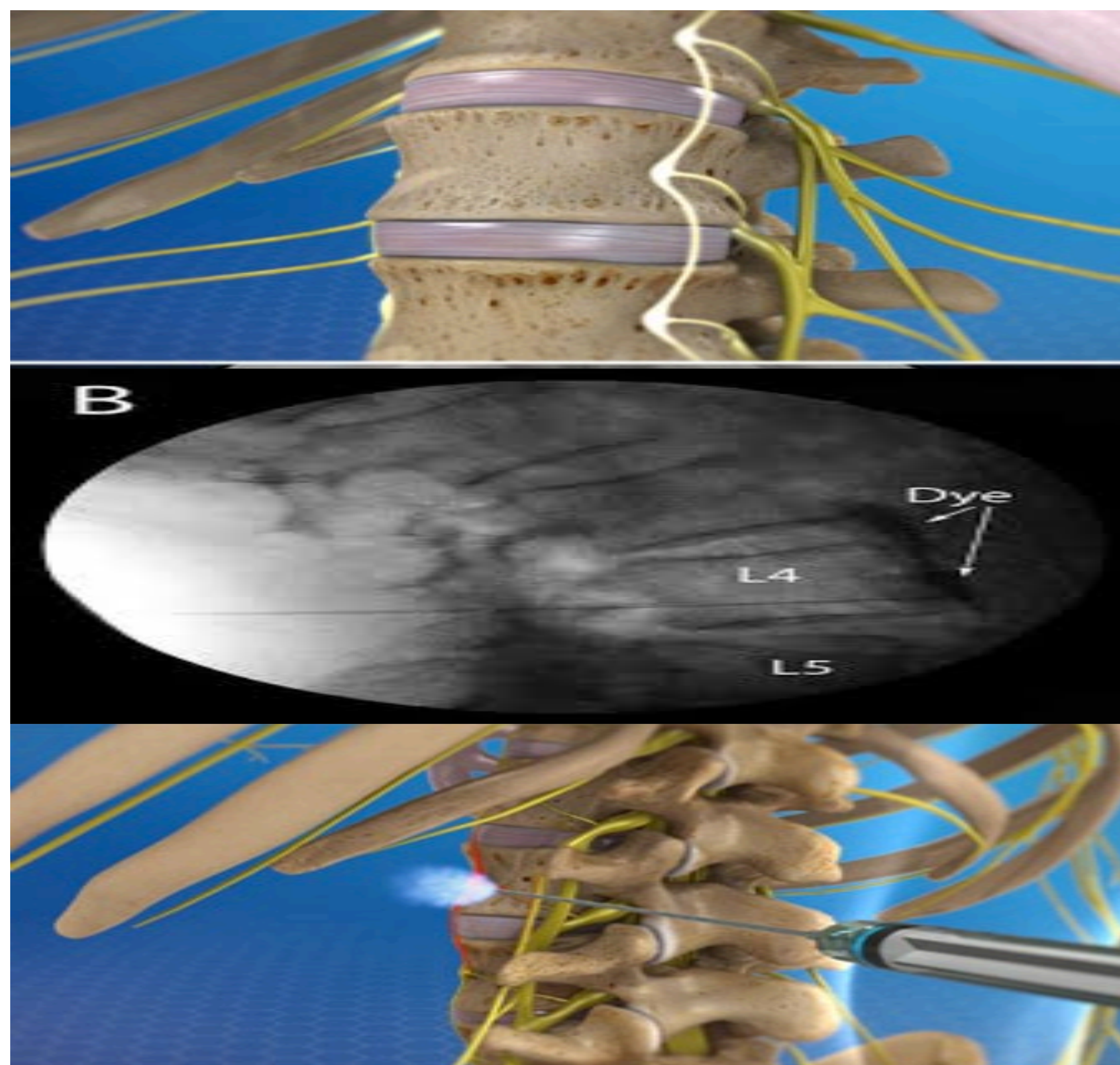
Introduction:

Complex Regional Pain Syndrome (CRPS) is a debilitating neuropathic pain condition characterized by sensory, motor, autonomic, and trophic disturbances, often following trauma or surgery. Management can include pharmacologic or interventional approaches.

Case Report: Patient is 35 y.o. female who had a type A Dissection and underwent Emergent Repair of the Acute Ascending Aortic Dissection. She was referred to the pain clinic for right foot pain that started post AAA repair. The pain encompassed her right large toe, heel and lateral foot. She was started on Gabapentin and transitioned to Lyrica. Patient was then diagnosed with CRPS had right foot swelling and tenderness. Right foot also had visibly paler skin color compared to the left with decreased strength on the foot and cold sensation to the touch. Patient underwent a Right L4 Lumbar Sympathetic Block.

Discussion: Two types of Complex Regional Pain Syndrome (CRPS). It is often associated with a combination of sensory and motor deficits. CRPS Type I is known to develop after an injury, while CRPS Type II occurs after peripheral nerve damage or a major event.

The patient developed CRPS type I after suffering AAA, with the resulting trauma and hypotension causing the regional foot pain she felt.



Diagnosing CRPS:

The diagnosis of CRPS is completed using the Budapest criteria. All four of the following must be met:

- (1) Continuing pain that is disproportionate to any inciting event
- (2) at least one symptom in three of the four of the following; hyperaesthesia or allodynia, vasomotor symptoms or temperature change, sudomotor like sweating and motor reports of decreased range of motion and weakness, and trophic changes (hair, nail, skin).
- (3) The patient must also display at least one sign at the time of encounter in at least two those categories as well.
- (4) All other diagnosis that explain the signs and symptoms must be excluded.



Treatment:

Nerve blocks are indicated for CRPS of upper and lower extremities via stellate ganglion block and lumbar sympathetic blocks, respectively .

Pharmacological treatments for CRPS include antiepileptic drugs such as Gabapentin and pregabalin have moderate evidence in improving symptoms such as allodynia and hyperesthesia.

References:

1. Bruehl S, Harden RN. Complex Regional Pain Syndrome Part 1: Essentials of Assessment and Diagnosis. *PM&R KnowledgeNow*. American Academy of Physical Medicine and Rehabilitation. Updated July 2019. Accessed September 13, 2025. <https://now.aapmr.org/complex-regional-pain-syndrome-part-1-essentials-of-assessment-and-diagnosis/#rehabilitation-management-and-treatments>
2. Bruehl S, Harden RN. Complex Regional Pain Syndrome Part 2: Management and Treatment. *PM&R KnowledgeNow*. American Academy of Physical Medicine and Rehabilitation. Updated July 2019. Accessed September 13, 2025. <https://now.aapmr.org/complex-regional-pain-syndrome-part-2-management-and-treatment/>
3. Faculty of Pain Medicine, Royal College of Anaesthetists. Criteria for diagnosis. *Faculty of Pain Medicine*. Published 2019. Accessed September 13, 2025. <https://fpm.ac.uk/documents/criteria-diagnosis>