

# Botulinum Toxin Treatment in a Case of Dystonia Associated with Complex Regional Pain Syndrome

## Kompleks Bölgesel Ağrı Sendromuyla İlişkili Distonili Bir Olguda Botulinum Toksin Tedavisi

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Dear Editor,

We have read with great interest the review titled “Current Approaches in the Treatment of Complex Regional Pain Syndrome” authored by Mrs. Tuncay, published in the 26<sup>th</sup> Volume, 3<sup>rd</sup> issue of your journal dated June 8, 2023.<sup>1</sup> We would like to express our gratitude for this comprehensive review of current approaches in the treatment of complex regional pain syndrome.

Dystonia disability associated with complex regional pain syndrome is an important problem that is highly resistant to treatment and can be seen in approximately 25% of patients with complex regional pain syndrome.<sup>2</sup> We would like to contribute to the review with our experience of botulinum toxin application in a case with persistent upper extremity dystonia and hyperalgesia despite rehabilitation practices, pharmacological and interventional algorithmic treatments.

Case: A 40-year-old female patient presented to our clinic with severe pain and limited mobility in the right hand. The patient’s complaints started three

years ago following a burn caused by spilling hot tea on the right wrist, palm, and fingers. Despite receiving pregabalin and rehabilitation treatments at external centers due to pain and limited mobility, which continued, the patient underwent stellate ganglion and suprascapular nerve block twice upon referral to our clinic. In addition to her current medications, duloxetine and prednisolone 12 mg were initiated and gradually reduced to 4 mg over time. A resting splint for the fixed dystonic posture in the flexor muscles, stretching exercises, and TENS were applied. Psychotherapy was also initiated. The patient, whose pain and dystonia persisted, was referred to an external centre for insertion of a cervical epidural catheter and a total of 2 pump fillings were performed. After these interventions, the patient’s pain decreased for a short time, but her complaints gradually increased and a total of 100 units of botulinum toxin injection was performed in the right wrist and finger flexors. In the control examination performed one month later, pain reduction up to 40% and increase in the range of motion of the wrist and fingers were detected. Three months later,

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botulinum toxin injection was repeated due to increasing complaints and physical medicine and rehabilitation sessions were started again.

The patient was informed about the publication of case report and written consent was obtained.

In the literature review, it has been reported that dystonia due to complex regional pain syndrome re-

sponds less to botulinum toxin treatment than primary dystonia.<sup>3,4</sup> However, in treatment-resistant cases such as our case, we think that the efficacy of treatment can be increased by using relatively high doses of botulinum toxin that can reduce muscle strength and repeating botulinum toxin injections every 3 months according to the patient's condition in combination with other methods.

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