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Comment on the Review 'Complex Regional Pain Syndrome' by Kishner et al.

'Kompleks Bölgesel Ağrı Sendromu' Başlıklı Derleme Hakkında Görüşler

To the Editor;

I recently read the article with interest titled 'complex regional pain syndrome' by Kishner and colleagues that was published in your journal (1). There are some points that I am not agreed with the authors and that I want to contribute.

Through its nearly 150 years of history, complex regional pain syndrome (CRPS) has been named with a number of terms. 'Shoulder hand syndrome' is one of the terms used. To my knowledge, although CRPS can also occur after stroke, the origin of the name was based on the observations that the syndrome could occur due to myocardial infarcts, not stroke in contrary to what the authors mentioned in the article (2).

CRPS is mainly a post-traumatic syndrome that occurs usually after an inciting event. Authors reported that precipitating event was unknown most of the time. In contrast, mostly the precipitating event is known, in around 90-94% of the cases. Previous publications reported the prevalence of spontaneous CRPS without an inciting event around 6-10% (3,4). We also found the frequency of CRPS developed with unknown etiology or spontaneously without a trauma as only 10.7% in our study with 168 patients (5).

As observed in clinical practice, many people experience a trauma, for instance a radius fracture, but only little develop CRPS. In my opinion, this implies that, there might be some precipitating factors for only someone to develop CRPS or just some of the people might have distinct structural characteristics that play as the key for initiating and promoting a complex process that can be triggered by a trauma. This has been one of many mysterious sides of the syndrome. Observations of some changes in also unaffected limbs, gene polymorphisms in cytokines, neurotransmitters and adrenergic receptors, RS 1048101 single nucleotide polymorphism that was found to be associated with the syndrome, HLA DR15, DQ1 that were reported to be possibly related with CRPS, are some of the findings in the current literature considering a predisposition for CRPS. However, this is still a subject needing further investigations.

I agree with the authors that three-phase bone scan (TPBS) is highly sensitive and specific for CRPS. Sensitivity and specificity of TPBS were found to be 31-50% and 83-100%, respectively (6). On the other hand, authors reported that findings in TPBS were not expected until at least 6 months. In contrast, there is an opposite relation; the sensitivity and specificity of TPBS increase as the time from the onset of symptoms decreases. Again in contrast, after 5 months, specificity of TPBS begins to decrease. Sensitivity and specificity in the first 5 months were reported to be higher than they were after 5 months (6). Optimum time to use TPBS to diagnose CRPS was reported to be within the first 5 months and the shorter the duration, the higher the sensitivity.

Currently there is no certain diagnostic tool for CRPS and the criteria for the diagnosis of CRPS do not include TPBS. The diagnosis still depends mainly on clinical findings. Thus, in my opinion, TPBS should be considered just as an aid to establish the diagnosis in patients on border or just to confirm the clinical diagnosis when rarely needed. Moreover, in my opinion, it should be kept in mind that whatever the duration is, even within the first 5 months, false positive or false negative results are possible with TPBS, so this should also be taken into account when evaluating the TPBS results.

Authors suggest that general awareness of CRPS is still poor and as a result the average delay in admission to a pain center is 30 months. This is approximately 2.5 years that seems to me a very long interval.

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The pain center at which the referred study was carried out might be a very specific center to where only very resistant cases were referred long after the onset of symptoms due to various treatments performed in other centers (3). In my opinion, CRPS is one of well-known conditions and the admission delay might not be explained by only general poor awareness of the physicians. Instead, main causes of lately admission in the study might be hard-to-treat nature of the disease and the feature of the center serving as the last step. Hence, data from such a specific center should not be generalized. Although ours is also tertiary hospital, mean duration of symptoms was around seven months and mean admission time was around only few months among 168 patients in our study (5).

In the article, spreading symptoms of CRPS were explained by myofascial pain caused by compensatory overuse of unaffected limbs. To my experience, although the manifestations of CRPS might advance and gradually involve the upper parts of the affected limb in some patients, the mirror-image or independent spread does not usually occur as a real spread of CRPS with all of its findings. Unaffected limbs usually show just sensory alterations, not the whole picture of CRPS. Myofascial pain is a distinct entity with its own specific findings. I agree with the authors that it is possible for a CRPS patient who has pain in one of limbs to overuse the other extremity and to develop myofascial pain but in my opinion this should not be considered as a spread of CRPS. In my opinion, central changes and reorganization might be more probable explanation for various sensorial alterations in unaffected limbs.

Physical therapy is still cornerstone in management of CRPS. It is performed usually in conjunction with various modalities of pain management. Physical therapy has been reported to be effective in functional improvement. However, evidence is still insufficient.

Steroid is one of the medications studied in the treatment of CRPS in various doses and durations. Authors stated the used steroid dose as 30 mg/d by referring few of previous trials. Some other reports used higher doses ranging between 40 mg/d and 80 mg/d with various durations (7,8). There is still no certainty of steroid usage regarding the dose and duration in CRPS (7,8).

In the article, vitamin C was stated to be one of medications used to treat CRPS. In contrast, vitamin C is an agent investigated for only prevention not for treatment (7).

There are incrementally emerging findings regarding the inflammatory features of the syndrome in recent literature. In my opinion, investigating the efficacy of biological agents in CRPS might be recommended for future trials.

Conflict of Interest:

Author reported no conflicts of interest.

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Reply to "Comment on the Review 'Complex Regional Pain Syndrome' by Kishner et al."

"Kishner ve ark.'nın 'Kompleks Bölgesel Ağrı Sendromu' Derlemesi Hakkında Yorumuna" Cevap

To the Editor;

We read with interest the letter to the editor about the article entitled "Complex Regional Pain Syndrome". Complex regional pain syndrome is a very difficult and controversial subject, and is interpreted differently by many people. We agree with the author that physical and occupational therapy is a key component of treatment. However, evidence based recommendations for this is still limited. We also agree that future trials with biologic agents may be of benefit.

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