Letter to Editor

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**Reference**


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**Biomechanics responsible for effect of elbow position on biceps tendon reflex: Authors’ reply**

Sir,

We thank the author(s) of the letter for taking interest in our article “The effect of elbow position on biceps tendon reflex” and appreciate the detailed comments concerning the biomechanical aspects of the subject. However, some minor points in this letter need clarifications.

Firstly, we think that the author(s) may inadvertently be mistaken in the comments by saying that the mean amplitude increased progressively from 90° to 150°, since the mean amplitude of the biceps tendon reflex was found to be decreased (not increased) progressively from 90° to 150° of elbow position in our study.

Secondly, the position of the forearm was not vertical at 90° or other elbow positions in our study, since we tested the biceps tendon reflex of the subjects on the examination table in a relaxed supine position with the elbow held at 90° and the hand on the abdomen. After the procedure was completed for 90° of elbow position, the angle of elbow was first extended to 120° and then to 150° for the same procedures. Thus, in addition to the other possible factors, the biomechanical aspects of this procedure may also account for the decrease in the amplitude of the tendon reflex by increasing the angle of the elbow; however, the changes in the biceps muscle size may be the most probable determinant of the variations in amplitude of biceps reflex.

Concerning the third point, as we mentioned in the article, maximum biceps tendon reflex amplitude was obtained at 90° elbow position; however, the mean amplitude of biceps tendon reflex obtained at 120° of elbow position was extremely close to that obtained at 90° of elbow position, and the difference between 90° and 120° of elbow position was not significant statistically in contrast to the difference 90° and 150° or to the difference 120° and 150° of elbow position. Thus, it is evident that the amplitude of the reflex decreases with the increase of elbow angle, however, this result does not let to propose tapping the biceps tendon with the elbow placed at only an angle of 90° to get the maximum amplitude.

In clinical examinations, it is important to compare tendon reflexes in terms of magnitude and symmetry. However, in neurophysiological examinations, it is also important to determine the latency as well as the amplitude of a reflex. It is obvious that the magnitude of the reflex response alters depending on the several factors including particularly the rate of the stretch, angle of the joints, the intensity of the tapping and also the biomechanical factors.

As a conclusion, in clinical and electrophysiological practice, while testing the tendon reflexes, it may be better to keep in mind that the magnitude (electrophysiologic equivalent of amplitude) of a reflex may change due to various factors including the position of the extremity.

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**Concurrent intramedullary and intracerebral tuberculomas**

Sir,

Eventhough central nervous system tuberculosis is an uncommon entity affecting 0.5% to 2% of patients with systemic tuberculosis, intracranial tuberculomas account for significant number of intracranial mass lesions in developing countries.1 However, intramedullary tuberculomas are very rare, seen at a rate of 2/1000 cases of central nervous system tuberculosis. The incidence of concurrent spinal and cerebral tuberculomas is still very rare with less than ten cases reported in the literature.2-6 An interesting case of concurrent spinal and cerebral tuberculoma who manifested simultaneously as acute quadriplegia and seizures reported here.

A 38 years old gentleman presented with sudden onset of weakness of all the four limbs of two weeks duration associated with retention of urine. Neurologically, his motor system examination revealed flaccid quadriplegia with grade 3/5 power proximally in both upper limbs and grade 0/5 power in both lower limbs with brisk deep tendon reflexes and extensor