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## The effects of hemiplegic shoulder pain on upper extremity motor function and proprioception self-efficacy

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Aim: The aim of this study was to investigate the effects of hemiplegic shoulder pain on upper extremity motor function and proprioception.

**Methods:** 122 hemiplegic patients treated in the physical therapy unit at Pamukkale University Hospital were included in this study. The patients' shoulder pain during activity was evaluated by Visual Analog Scale. According to pain scores, cases were divided into two groups as group with pain (group one, n=76) and group without pain (group two, n=46). Upper extremity motor function level and proprioception were assessed by using Fugl Meyer Motor Function Scale and Laser Pointer Assisted Angle Reproduction Test, respectively. Proprioception test was repeated three times for the angles of 45, 60 and 90 of shoulder flexion. The mean of these scores were used for analyses.

**Results:** The average age were calculated as  $61.54\pm16.33$  for group one and as  $55.93\pm16.58$  for group two. The demographic characteristics of the groups except marital status were similar. Upper extremity motor function (p=0.005) of group one were found significantly worse than group two. When groups were compared in terms of hemiplegic shoulder's proprioceptive sense, it was found that group one had more impaired shoulder position sense (p<0.05). While the maximum deviation was seen at the angle of 45 of shoulder flexion (P=0.001), the minimum deviation was seen at the angle of 90 of shoulder flexion (P=0.010).

**Discussion:** In our study, it was concluded that hemiplegic shoulder pain after post-stroke is a main determinator of upper extremity function and proprioception sense at different angles.

## Biography

Duray M has completed his PhD at the age of 25 years from Pamukkale University. He is also study of Master Thesis Subject: The relationship between physical fitness and falling risk and fear of falling in community-dwelling elderly people with different physical activity levels. He has published more than 3 papers in reputed journals. Present time he is Research Assistant Pamukkale University, School of Physical Therapy and Rehabilitation Kinikli, Denizli/Turkey

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