Survey of Various Post Stroke Pain Syndromes and the Related Risk Factors

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Received: 26/Oct/2011 Accepted: 2/Mar/2012

Abstract

Introduction: Stroke is the most common cause of disability among neurologic disorders. Post stroke pain is a common and often neglected complication with prevalence in several studies ranging from 18.6% to 49%. Different types of pain occurs following stroke that including central, nociceptive, spastic, headache, and others. It is also important to differentiate between various causes of pain because of their different clinical pictures, risk factors and treatments.

Objective: To evaluate the relative frequency of post stroke pain syndromes and respective related risk factors.

Materials and Methods: In this cross–sectional descriptive study 389 consecutive patients with stroke during the last 3 months, who visited in spring 2011 at the neurology clinic of Poursina Hospital for their routine follow up, were, interviewed and examined for the presence and classification of post stroke pains. Demographic data and stroke characteristics were also registered. Collected data were analyzed using SPSS 16 software version.

Results: Among the 389 patients, 142 (36.5%) complained about post stroke pain. The most common types of pain were spastic pains and headaches (12.9% and 11.1%, respectively) and the most common locations of pain were upper limbs, and head (18.5% and 11.3%, respectively). Nociceptive and central pains
were significantly more common in deep gray nuclei and internal capsule infarcts (P=0.002 and P= 0.001, respectively) and headache was more common in brainstem infarcts (p= 0.022). There were no associations between other types of pain and location of lesion.

**Conclusion:** Post stroke pain is a common complication of stroke. As pain syndromes adversely affect the quality of life, and are potentially treatable, it is important to consider the occurrence of pain in all stroke patients in any outpatient visit. Pattern of correlated risk factors such as location of the lesion can help predict certain types of post stroke pain syndromes.

**Key word:** Pain/ Stroke