

Discussion

The shoulder pain is very common problem facing the neurologist in the management of patients with stroke ^(1 – 6). This problem occurs in both types of stroke whether hemorrhagic stroke or ischemic stroke.

The present study showed no significant difference between ischemic stroke and intracerebral hemorrhage in the development of shoulder pain, this agreed with. Other studies like Hanukah et al study and Anderson study ^(5,7).

The present study showed an equal male to female ratio of the shoulder pain in both types of strokes, and this result is in agreement with the results of other studies like Hanukah et al, Anderson study, Jeperson. Jorgenson study and Walsh study ^(5, 7, 8,12).

The nearly equal male/ female ratio of shoulder pain with no significance difference between both stroke type in occurrence of shoulder pain; support the opinion that the shoulder pain is related to the hemiplegia, whatever of its cause and not related to the type of stroke or to the gender difference and this is in agreement with Roy et al study, Hanukah et al study, Anderson study, Jeperson – Jorgenson study, Chaca study and Walsh study ^(4,5,7,8,11,12).

In the present study the shoulder pain happened more frequently in elderly than in younger aged group; this correlation with older age group is related to already diseased joint, as well as less active life style in elderly patients and this agreed with Walsh study ⁽¹²⁾.

The present study showed no significant correlation between weakness side (whether right or left sided weakness) with occurrence of shoulder pain and this is in contrast to Roy et al ⁽⁴⁾. Who found a significant relationship with non-dominant left sided weakness

and in agreement with Walsh who reports no correlation with side of weakness ⁽¹²⁾.the present study analyze the relation of higher cerebral function, concentrating on aphasia. whatever its type, cortical sensory dysfunction (graphesthesia, astereognosis. and sensory inattention.); We found significant relation between shoulder pain with higher cerebral dysfunction and prove that the patients with cortical involvements are at higher risk for shoulder pain development. This result is agreed with Roy et al study ⁽⁴⁾.

The study showed that the shoulder pain occurs mostly in the second and third months post stroke in both types of stroke this period may be the time required to clear the effect of muscle stiffness.

The present study showed no significant correlation between muscle power grading and the development of the shoulder pain. And this result is contrasting to Roy study ⁽⁴⁾, Hanukah et al study ⁽⁵⁾, Anderson study ⁽⁷⁾,Jeperson – Jorgenson study ⁽⁸⁾, Chaca study ⁽¹¹⁾ and Walsh study ⁽¹²⁾.

The study showed that frozen shoulder is the most common cause of the hemiplegics shoulder pain; other causes like referred pain form relatively high percentage (35.7%) from the causes of shoulder pain. Other causes like direct trauma (8.9%) shoulder joint subluxation (7.1%) and rotator cuff syndrome (7.1%). We did not record Brachial plexus traction neuropathy in our patients.

Those finding is in contrast to Walsh ⁽¹²⁾ and Braus ⁽¹³⁾ studies which showed high incidence of shoulder subluxation more than other causes, small sized sample in comparison to those studies may explain the last difference in causes of shoulder