

Neck pain and backache shows major problems in the society and a common reason for consulting a physician, a rheumatologist, an orthopedic, a physiotherapist, etc.

Evaluate the diagnostic accuracy of both electro diagnostic tests and MRI in patient presented with neck pain and lower back ache as well as demonstrate the disproportion between them and their relation to history and clinical findings in Babylon province.

Two hundred fifty subjects of both male and female were involved in this study, 100 with neck pain, 50 with back ache and the other 100 as a control group, ranged from 30-60 years, all of them were free from other medical and neurological diseases which could affect peripheral or central nervous system .

It was conducted on a comprehensive medical and neurological examination in addition to the overall general physical examination of the cervical spine and lumbar sacral spine examination and electrophysiological study which include both nerve conductive study and EMG as well as MRI were done for all the involved groups study. The electrophysiological test were done at the neurophysiology unit of Merjan Teaching hospital in Babylon City ,during the period April\2015 to October 2015.

This study revealed that cervical neck pain and back pain is more common in female than male . In neck pain 89 % had positive EMG results and mainly the C5-C6 roots lesion segment. Majority of patients had moderate roots lesions severity (49.75%) while those who had sever degree showed the lowest percentage (12.4%). 94% showed positive MRI, most of patients had bilateral root lesion (49.4%) and in unilateral, the left side is more common (32.6%).

In this study females were more prevalent than males in developing neck and back pain and these increases with the age. EMG could be more dependable test than MRI in diagnosis root lesion and determining the chronicity of it in which MRI could not reach it, while NCS has little role in diagnosis these cases, so to give more accurate and imperceptible information in diagnosing root lesion both MRI and electro diagnostic study should be done.