

# Hand on Head Sign: A New Clinical Sign

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## Introduction

Neck pain is one of the commonest ailments to bring people of working age to the doctors. Neck pain that involves the adjoining unilateral shoulder and arm is often found to be confounding. Some times it is only the pain around the scapula and shoulder without any pain in the neck. Common disorders with this presentation mentioned above can be: myofascial pain syndrome or myofibrositis, cervical disc prolapse with radiculopathy, periarthritis of shoulder (with minimal restriction of the range), injury or strain of the shoulder, malignancy of apical part of the lung, malignancy – secondary deposit in the brachial plexus especially from thyroid, lung, and upper gastrointestinal tract.

Many a times pain syndromes do not occur with the characteristic features and often present with overlapping signs. Clinical isolation is important because the management is always different even sometimes diverse. This is more important in case of the pain present at the lateral aspect of neck and adjoining shoulder area. Most common overlapping cases are cervical radiculopathy because of cervical disc prolapse and myofascial pain syndrome.

Cervical radiculopathy appears as a symptom of shoulder pain or arm or forearm pain with or without radiation. There may be tenderness in the adjoining shoulder area including trapezius.

There are conditions like myofascial pain syndrome where patients present with the similar pain symptoms and

differentiating features like loss of tendon jerks or sensory deficiency may not be prominent enough to give a lead to diagnose specifically.

In this situation radiology may bring a solution like MRI of the cervical spine confirming the radicular compression or excluding it. But is it worthwhile to go for the expensive investigation like MRI for every neck and shoulder pain?

A clinical test or feature, if available can be a best answer to differentiate cervical radiculopathy from other causes of neck and shoulder pain.

## Procedure to elicit this sign of cervical radiculopathy

Ask the patient affected with the neck and shoulder pain to put the hand of the affected upper limb on the head and ask him if the patient feels any relief. If it is a positive sign patient will report relief within seconds.

## Discussion

Positive sign means patient has cervical radiculopathy not other pain like myofibrositis. In case of other etiology there will be either no change or aggravation.

In case of positive sign patient will even sometime come to clinic with the upper limb holding up on the head.

If we look at the anatomy of the roots exiting through inter-vertebral foramina the mechanism of this sign will be evident. In a narrow space in the foramina space is compromised with the bulge of the disc. Root makes a compromised curved course in the spinal canal and vertebral foramina. This curved course can be maintained if the nerve root is kept loose. This looseness is possible if the upper limb is hold up on the head. This is the mechanism of the sign. When the limb is allowed to hang downwards root is pulled taught over the bulging disc and pain starts.

Three cases who could afford to complete the MRI of the cervical spine showed paracentral disc prolapse of the same side of the symptom.

This sign may be helpful in early and easy identification of cervical radiculopathy and ward off expensive investigations like MRI or NCV to an extent.

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### Bibliography

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