

Clinical Investigative Study

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The Correlation between Spurling Test and Imaging Studies in Detecting Cervical Radiculopathy

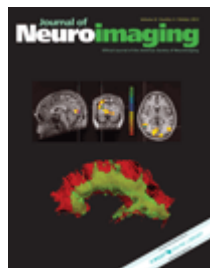
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- Abstract
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Keywords:

Spurling test; cervical radiculopathy; CT scan; MRI scan; physical examination; imaging studies

ABSTRACT

BACKGROUND

Cervical spine symptoms are a major cause of visits to general or spinal orthopedic surgeons or even primary care physicians. Although in this era the imaging studies can precisely rule out or diagnose pathologies in the spine, all of these studies have limitations. Computerized tomography (CT) scan consists of radiation exposure to the patients and it should be done with caution. Magnetic resonance imaging (MRI) is a highly effective imaging tool, but in many countries it is still costly. The goal of our study was to determine whether a simple clinical test can help the clinician to identify the patients who need to be sent for these imaging studies.

METHODS

Two hundred fifty-seven patients with clinical cervical radiculopathy underwent complete physical examination that also included the Spurling test. After that, all patients were sent to imaging studies of the cervical spine (CT and/or MRI). Correlation between the physical examination using the Spurling test to the imaging studies was done.

RESULTS

Sensitivity of the Spurling test to nerve root pathology was 95% and specificity was 94%.

CONCLUSION

This paper demonstrate that patients with positive Spurling test have probable nerve root pressure and should be sent for further imaging studies. In patients with negative Spurling test, the possibility of nerve root pressure is less likely.

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