# Role of MRI in Evaluation of Cranial Nerve Pathologies

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## ABSTRACT

**Introduction:** The human body has 12 pairs of cranial nerves that control motor and sensory functions of the head and neck. The anatomy of cranial nerves is complex and its knowledge is crucial to detect pathological alterations in case of nervous disorders. MRI brain using cranial nerve protocol is routinely used in evaluating patients presenting with cranial nerve related symptoms and pathology. It is also a non-invasive study. **Material & Method:** Retrospective observational study was done in the 60 patients over a course of 1 year from April 2022 to 31 st march 2023 at department of radiodiagnosis, SVP hospital, NHLMMC, Ahmedabad with Siemens MagnetomSkyra using CISS protocol and contrast images. **Result:** Out of 60 patients having cranial nerve related symptoms, 52 showed abnormal finding/ pathology in MRI scan. The most commonly observed abnormality was vascular pathology causing nerve compression followed by compression by mass lesion. **Conclusion:** Because of its high resolution and no radiation exposure, MR imaging is the gold standard investigation in visualising cranial nerves & identifying pathologies in patients having cranial nerve related symptoms. Its ability in identifying subtle lesions & its extent is excellent.

**Keywords:** MRI in Cranial Nerve, CISS Protocol, Atrophy And Demyelination