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Metrizamide CT Myelography in Cervical Myelopathy and Radiculopathy: Correlation with Conventional Myelography and Surgical Findings

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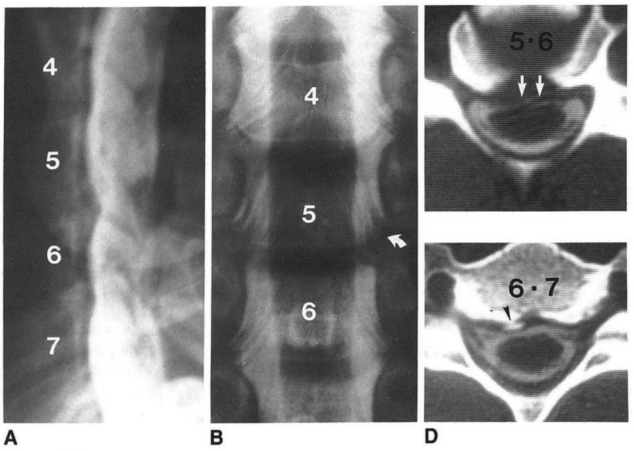
Conventional myelography, metrizamide computed tomographic (CT) myelography, and surgical findings were correlated in 30 patients with cervical radiculopathy and/or myelopathy. In 60% of patients, metrizamide CT myelography provided significant additional information including better characterization of the abnormality, lateralization if the conventional myelogram was indeterminate, more definitive demonstration of cord atrophy, foraminal narrowing not appreciated on myelography, and demonstration of abnormalities distal to a myelographic block. In no case was a myelographic abnormality not detected on metrizamide CT myelography. In patients with cervical myelopathy, a cross-sectional diameter of the cord equaling less than 50% of the subarachnoid space is predictive of poor patient response to surgical intervention.

Computed tomography (CT) has been widely accepted as an initial radiographic examination in the evaluation of lumbar radiculopathy [1–3]. The assessment of spinal pathology in patients with cervical myelopathy and/or radiculopathy has continued to consist primarily of conventional myelography. While previous studies have reported CT findings in the abnormal cervical spine [4–15], none have compared metrizamide myelography with metrizamide CT myelography and correlated the observations with surgical findings. This approach permits the development of objective criteria for the abnormal cervical metrizamide CT myelogram. The technique may in many cases eliminate the necessity for conventional myelography.



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Acoustic Neuromas: Evaluation by Magnetic Resonance Imaging

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**Proton magnetic resonance imaging (MRI) examinatio
tients with seven acoustic neuromas, and the results wer
tomography of the internal auditory canals, contrast-enh
(CT), and air CT cisternography. All tumors were identifie
tumors (> 1 cm diameter) looked similar to the tumors se
extent of the tumor was better seen with MRI in two ca
diameter) cerebellopontine angle and intracanalicular tur
with appearances corresponding to those seen with air
effects were encountered with the MRI examinations. MF
alternative to contrast-enhanced CT and air CT cistern
acoustic neuromas.**

Acoustic neuromas are relatively common benign tu
the vestibular division of the eighth cranial nerve and c
cerebellopontine angle and internal auditory canal (IA
diagnosis depends on the use of plain radiographs
contrast-enhanced computed tomography (CT), air or
vertebral angiography. Metrizamide CT cisternograph
gas CT cisternography but is associated with a higher

Abnormalities on plain radiographs and conventiona
development of bony changes that may be present v
Contrast-enhanced CT is accurate in the detection of
than 1 cm in size, but false negatives may occur in sm
tumors [2, 3]. Therefore, air or gas CT cisternography
tumors and is very accurate [4], although false negative
of arachnoid adhesions or very narrow IACs [5, 6
reserved for cases in which the surgeon needs to kno
tumor.

Early reports on low-resolution proton magnetic res
described acoustic neuroma appearances similar t
enhanced CT [7–9], although intracanalicular extension
has also been described [10]. With recent improver
images, including the use of a 256 × 256 reconstructi
to routinely image the normal IAC containing the seven
This provides the anatomic basis for the demonstration
and gives MRI as good a potential for diagnosis as oc
CT cisternography. We compared the results of conven
enhanced CT, air CT cisternography, and MRI of t
acoustic neuromas.

Subjects and Methods

Six patients (four men and two women) with clinical diagnc

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