



NEURO IMAGE

THE USE OF METRIZAMIDE

Metrizamide, or Amipaque, is now being widely used in Canada ever since it was accepted a few years ago.

Numerous publications are stressing its usefulness in the accurate assessment of the spinal cord and of the cauda equina. Not only is it used as a replacement of Ethiodan or Pantopaque in myelography but also as a replacement of the same in cisternography, and of oxygen in pneumoencephalography. It is also used in conjunction with computed tomography in the assessment of the spinal canal. There is no doubt that such a wide range of indications make Metrizamide a very useful contrast in the investigation of many neurological disorders.

Our short experience is that Metrizamide is less innocuous than most reports may indicate. It has side effects that are unpleasant to the patient and sometimes dangerous. We think that the use of Metrizamide should be reserved for specific problems, and the recommended pre-medication (Valium) should always be given: this in order to prevent or control those most common side effects, headaches, nausea, vomiting and also the rare but possible transient neurological disorders.

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*See survey on last page.

METRIZAMIDE AND COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF SYRINGOMYELIA

We recently studied several examples of syringomyelia. The investigation was done by myelography and computed tomography. Metrizamide was injected in the lumbar region in concentration of 220 mg/ml in all cases. Computed tomography was done roughly one hour following the contrast injection and a second time six hours later.

The only conclusions that we derive from our observations are the following:

- Metrizamide easily reaches the fourth ventricle. (Lushka foramina probably help as much as Magendie's).
- Faint opacification of the syrinx is present on the 6 hour scan.
- The communication at the obex is probable but not demonstrated.

The phenomenon of ball-valve effect could be different from one patient to another; that could explain variable filling. Contrast will be more obvious in an empty cyst than in a full one because it won't be diluted. There is a slight change in density between the 0 and 6 hour scans, as if the contrast had diffused within the cord without any layering.

It would seem that computed tomography with Metrizamide does not always give the anticipated results. Many unknown factors remain. For better results, we should perhaps change or vary the concentration of the contrast and the lapse of time between exams.

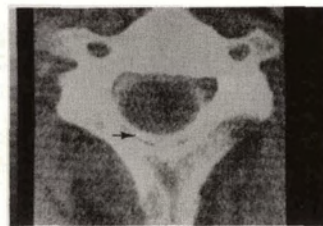


Figure 1
1 hour scan: contrast in SAS outlining spinal cord



Figure 2
6 hour scan: less contrast in SAS
relative increase density of the cord

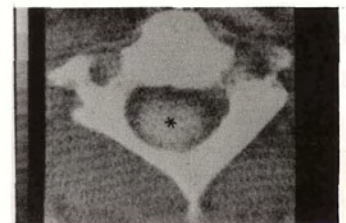


Figure 3
Metrizamide within the spinal cord injected
by percutaneous puncture

