Myodil
Iopamidylate injection BP

Myodil is a bland aqueous liquid of low viscosity suitable for myelography and ventriculography. It contains 30 per cent of ethylene glycol and is a mixture of Iopamidylate and Iopamidol. In appearance it is a colourless mobile liquid, very stable, but sensitive to light.

Myodil has a specific gravity of 1.26 and is immiscible with the cerebrospinal fluid. Iopamidylate is usually well-tolerated. It is much more fluid than iodised contrast media and is conveniently introduced into the subarachnoid space. There is little tendency to globulate, and renal excretion is rapid. The material may be removed by aspiration after the examination; any remaining material is gradually absorbed.

Administration and dosage

Myelography: Usually 6 ml of Myodil is introduced into the spinal subarachnoid space. If a complete block is present, a smaller volume is adequate. Generally, the more mobile the lesion, the larger the quantity required.

Ventriculography: Good visualisation of the third and fourth ventricles and the aqueduct of Sylvius can be obtained by use of Myodil. This is normally tolerated well. The amount injected into the selected lateral ventricle is usually 1 to 1.5 ml, but the dose can range from 0.5 ml to 2 ml according to circumstances.

Intra-uterine use: 9 ml of Myodil has been injected into the amniotic sac to outline the foetus prior to in-situ uterine blood transfusion.

Contra-indications

As for simple lumbar puncture.

Warnings

In the presence of blood in the cerebrospinal fluid (either as a result of lumbar puncture or the original disease) myelography with Myodil may cause severe after-effects. Under these circumstances the examination should be postponed. If Myodil enters the blood stream, it can cause shock and violent convulsions.

Hyperventilation has to be performed during pregnancy, it should be borne in mind that the raised intracranial pressure may cause the raised intracranial pressure. In patients with co-existing pregnancy may become hypertensive (British Journal of Radiology, 1973; 46: 31-32).

Necul, all-glass syringes should be used, as Myodil may dissolve certain materials from plastic syringes and needles. If a plastic syringe is employed, the Myodil should be drawn up immediately before injection to minimise contact with the syringe.

Precautions

If possible, ten to fourteen days should elapse between lumbar puncture and intra-uterine myelography.

Many radiosensitive tumours are not removed as much Myodil as possible after myelography, in the belief that this reduces unpleasant after-effects; however, when any indurate amounts of the medium are involved, some consider it better not to aspirate if this requires another lumbar puncture.

If it is required to evaluate thyroid function in patients who have undergone myelography, it should be noted that serum protein-bound iodine levels may be raised, sometimes for as long as ten years after the procedure (see below).

Adverse reactions

Provided a suitable technique of injection is used, preferably with television control, serious after-effects are rare. As with other lumbar puncture, headache is frequent, and after myelography it is sometimes severe, with vomiting and photophobia. Pyrexia and stiff neck can occur, usually soon after myelography; rarely, they appear some weeks after the examination. Symptoms normally resolve within several days. Some patients react to myelography with low back pain, and previous symptoms such as sciatica may be exacerbated.

Occasionally arachnoiditis has been reported, but that type of reaction has not been associated with a specific disease or technique of injection. The literature contains references to adhesions and fibrous exudate being found on operation in patients who had at some time undergone myelography with isopropylate. The aetiologic nature of these reports, and sometimes the spuriousness of information about the patient's condition prior to myelography, make it difficult to evaluate the role of isopropylate. However, these reports probably add weight to the case for removing as much Myodil as possible at the time of investigation.

Storage

Protect from light.

Packaging

Box of three 5 ml ampoules.

Glaxo

Myodil is a trademark

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