MYODIL

**Presentation** Ampoules containing iophendylate injection BP, a colourless to pale yellow viscous liquid which darkens on exposure to light. It contains 30% of organically combined iodine, has a density of approximately 1.26 g/ml, and is immiscible with cerebrospinal fluid.

**Uses** Myelography, Ventriculography, Visualisation of the third and fourth ventricles and the aqueduct of Sylvius.

**Intra-uterine use.** To outline the fetus prior to intrauterine blood transfusion.

**Dosage and administration** Myelography: In general, sufficient Myodil is introduced into the spinal subarachnoid space to allow all the structures under suspicion to be outlined by simple posturing of the patient. Usually 6 to 9 ml are ample, and if complete block is present, a smaller volume is adequate. Occasionally up to 18 ml are necessary if the subarachnoid space is wide. The material should be removed by aspiration after the examination unless it is required for further study.

**Contraindications, warnings, etc**

**Contraindications:** As for simple lumbar puncture, Myodil should not be used when there is a history of reaction to iophendylate or to iodine. The procedure should be postponed if there is blood or bilirubin in the spinal fluid.

**Warnings:** Myodil should NOT be emulsified with cerebrospinal fluid, as this is reported to increase the frequency of toxic reactions. If Myodil enters the blood stream, it can cause shock and violent coughing.

When myelography has to be performed during pregnancy, the raised maternal serum iodine levels may result in congenital goitre and hypothyroidism in the fetus. Patients with nodular goitre may become thyrotoxic.

Ideally, all-glass syringes should be used, as Myodil may dissolve substances from some plastic syringes and/or their rubber plungers. If a plastic syringe is used, the Myodil should be drawn into it immediately prior to injection to minimise contact with the syringe.

The risk of induced arachnoiditis and aseptic meningitis has been reported to be enhanced in patients with multiple sclerosis.

**Precautions:** If possible, 10 to 14 days should elapse between lumbar puncture and subsequent myelography.

As much Myodil as possible should be removed after the procedure, but when only small amounts are involved, most consider it reasonable not to aspirate if this requires another lumbar puncture. Retention of Myodil may cause prolonged elevation of the serum protein-bound iodine, thus invalidating diagnostic PBI estimations.

**Side-effects:** Myodil is usually well-tolerated, and provided a suitable technique of injection is used, preferably with video control, serious effects are rare. Myodil usually causes a slight increase in the white cell count and protein of the CSF, and diagnostic examination should therefore precede use of this contrast agent.

Hypersensitivity reactions, probably anaphylactic in type, are rare, but may be severe or even fatal. Immediate withdrawal of the Myodil should be performed if there is indication of such a process. Emergency drugs should always be available to deal with crises. As with simple 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. Low back pain is not uncommon, and previous symptoms such as sciatica may be exacerbated. Symptoms normally resolve within several days, but if they persist, any residual Myodil should be removed, and where warranted, a suitable dose of hydrocortisone sodium succinate injected intrathecally.

Post-myelography arachnoiditis, which may be severe, occurs in some patients, and adhesions and fibrous exudate may be found on operation in patients who had at some time undergone myelography with iophendylate.
The emphasises the importance of removing as much Myodil as possible at the time of investigation.

**DOSAGE:** Aspirate the Myodil.

**Pharmaceutical precautions** Protect from light; do not use if discoloured.

**Legal category** POM.

**Package quantities** Box of three 3 ml ampoules.

**Further information** Nil.

**Product licence number** 0004/5099.