What is Magnesium Sulfate Injection and what it is used for

Magnesium Sulfate Injection is used to treat low levels of magnesium in the blood where it is not possible for the medicine to be taken by mouth. It may also be used to prevent seizures (fits) caused by a serious complication of pregnancy known as eclampsia. It is used in the treatment of acute hypomagnesaemia.

What you need to know before you are given Magnesium Sulfate Injection

You should not be given Magnesium Sulfate Injection if:
- you are allergic to Magnesium Sulfate, its salts or any of the other ingredients of this medicine listed in section 6.
- you suffer from severe kidney failure.

Warnings and Precautions

Talk to your doctor, pharmacist or nurse before receiving Magnesium Sulfate if you:
- suffer from any kidney problem.
- suffer from disease of the muscles causing drooping eyelids, double vision, difficulty in speaking and swallowing and sometimes muscle weakness in the arms or legs known as myasthenia gravis.

During treatment

Your blood calcium levels will be routinely monitored whilst taking Magnesium Sulfate.

Other medicines and Magnesium Sulfate Injection

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription.

Medicines which may interact with Magnesium Sulfate Injection include:
- Digitalis glycosides e.g. digoxin (a medicine used to treat heart problems)
- Barbiturates (e.g. amobarbital)
- Opioids (e.g. morphine)
- Hypnotics (e.g. nitrazepam)
- Muscle relaxants e.g. tubocurarine
- Calcium channel blockers e.g. nifedipine or nimodipine (medicines used to treat high blood pressure) which could result in calcium ion imbalance causing abnormal muscle function.
- Aminoglycoside antibacterials (such as Streptomycin) which may increase the risk of hearing loss

Pregnancy, breast-feeding and fertility

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

It is not advisable to administer magnesium sulphate during pregnancy or breast-feeding unless considered essential, and it must be administered under medical supervision. If used in pregnant women the baby's heart rate will be monitored and it will not be used within 2 hours of delivery.

Driving and using machines

There are no known effects of Magnesium Sulfate Injection on driving and using machines. Please speak to your doctor before driving or operating machinery.

How Magnesium Sulfate Injection will be given

Your doctor will give Magnesium Sulfate Injection to you into a vein (intravenous) or into the muscle (intramuscular) either by injection or infusion (drip). Your doctor will decide how much Magnesium Sulfate should be given to you.

For the treatment of low magnesium levels:
You will be given up to 40g by slow intravenous infusion (drip) (in glucose 5%) over a period of up to 5 days.

To prevent fits associated with eclampsia:
After an initial intravenous dose you will be monitored for 24 hours and then you may be given either an intravenous infusion (drip) or regular intramuscular injections.

Intramuscular Maintenance Regimen
A loading dose of 4g MgSO4 IV (usually in 20% solution) over 5min (minimum, preferably 10-15 min) is followed immediately by 5g MgSO4 (approx. 20mmol Mg2+) (usually in 50% solution) as a deep IM injection into the upper outer quadrant of each buttock.

Maintenance therapy is a further 5g MgSO4 IV every 4h, continued for 24h after the last fit (provided the respiratory rate is >16/min, urine output >25ml/h, and knee jerks are present).

Intravenous Maintenance Regimen
A loading dose of 4g MgSO4 IV (or in some cases 5g MgSO4 IV, as described above), is followed by an infusion of 1g/h continued for 24h after the last fit.

Continued overleaf
Component Code: D04395

**Prod:** Magnesium Sulfate 50% w/v PIL PL 12064/0013 injection

**Paper Size:** 170 x 296 mm

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