

**Patient  
Information**

# Magnesium sulphate (MgSO<sub>4</sub>) in pregnancy

## Introduction

This leaflet has been written to give you information about a medicine called magnesium sulphate.

Magnesium sulphate (MgSO<sub>4</sub>) is a medicine offered to women whose baby will be born between 24 and 30 weeks of pregnancy. This is because we know that it can protect some babies from developing cerebral palsy.

You have been given this leaflet to read because either a decision has been made by the doctor that your baby needs to be born early, or you have gone into premature labour and it is believed that having the magnesium sulphate would be of benefit to you and your unborn baby.

## What are the risks to my baby if it is born early?

Every year over 8,500 women in the UK give birth early because of complications with their pregnancy. About 1% of these babies are born before 30 weeks.

Being told that you might give birth early can be a confusing and worrying time for you and your family. Your doctors and midwife will talk to you about the risks of early birth and can help you to make decisions about you and your baby's care.

Being born early can mean that some babies may have a higher risk of breathing difficulties and developing an infection. Babies who are born early can also have difficulty with maintaining a good body temperature and feeding properly. In most babies, these problems will get better with the help of the neonatal doctors and nurses.

A small number of babies can develop long term problems because they have been born prematurely. This can affect their brain and could result in cerebral palsy or problems with sight and hearing.

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Cerebral palsy is a general term describing conditions that cause problems with movement. It is caused by harm to the brain at any stage of development and there is a higher risk of this when a baby has been born prematurely.

Cerebral palsy will affect children in different ways and to different degrees. It can often take time to work out how a child is affected. Babies who are born prematurely will need to have regular check-ups to monitor their development. About 1 in every 10 babies who are born before 30 weeks develop a form of cerebral palsy.

Although cerebral palsy cannot be cured, there is support available from specialist teams to help those affected by the condition.

**What can be done to prevent cerebral palsy?**

Unfortunately, we do not know how to stop babies developing cerebral palsy. We do know that giving magnesium sulphate to women whose baby may be born prematurely can reduce the risk that their baby will develop cerebral palsy by 30%.

**What are the risks of taking magnesium sulphate?**

Women who are given magnesium sulphate may experience some short-term side effects. The most common side effect is feeling very hot and nauseous when the medicine is first administered. You may also get a headache. These side effects disappear very quickly, usually within half an hour.

You will also be monitored for the less common side effects, such as low blood pressure or problems with your breathing.

There are no known risks to the baby when the mother is given magnesium sulphate.

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## **Does magnesium sulphate stop all babies getting cerebral palsy?**

No, some babies will still go on to develop cerebral palsy, even though their mothers have been given magnesium sulphate.

Research shows that 1 case of cerebral palsy is prevented for every 37 mothers who receive magnesium sulphate. It is very effective at reducing the risk of developing cerebral palsy by half in babies who are born before 30 weeks gestation.

Magnesium sulphate may also be of some benefit for babies who are born between 30 and 34 weeks gestation, but we are less sure of how much it would reduce the risk of cerebral palsy developing.

## **Is every woman offered magnesium sulphate?**

Magnesium sulphate may not be suitable for all women. It may be offered to women who are between 24 to 30 weeks pregnant and who are likely to give birth within the next 24 hours. Your doctor and midwife will discuss this with you and you can ask them questions about how magnesium sulphate can protect your baby.

Magnesium sulphate needs to be given at sometime within the 24 hours before giving birth for it to have full effect, but it still may have some benefit if given at any time before birth.

If your baby needs to be born urgently (within the hour) then you may not get the full course of magnesium sulphate or giving magnesium sulphate may not be an option.

## **How will I be given magnesium sulphate?**

The doctor or midwife will insert an intravenous drip in to a vein in your arm. The first dose will be given to you as a single amount over 10 to 20 minutes and then a second dose is given to you continuously over the next 24 hours via an electronic pump. You will be monitored closely throughout.

## **Do I have to have magnesium sulphate?**

You do not have to accept this treatment and your decision will not affect the care you and your baby receive.

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## **Where can I get more information about premature birth and what this means for my baby?**

You can talk to your doctor and midwives for more information about magnesium sulphate, pre-term labour and what this means for your baby.

It is important that you feel that you have all of the information you need to make the right decisions for you and your baby.

You can also ask your midwife to arrange for you to meet with a neonatologist (a newborn baby doctor) who can answer your questions about what you can expect to happen to your baby when it is born. You may also be able to visit the Neonatal Intensive Care Unit to see where your baby will be cared for after birth.

### **Further information**

#### **Bliss**

Tel: 0500 618 140 – Freephone from landlines

Monday to Friday, 9:00am to 9:00pm

Website: [www.bliss.org.uk](http://www.bliss.org.uk)

Bliss, the special care baby charity, provides a wealth of information and support to the families of premature and sick babies.

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## Making a choice

### Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



### Ask 3 Questions

**To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.**

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation\* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85

<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>