



Steroid injections in pregnancy

Antenatal corticosteroids (more commonly known as steroids) are a medication that is offered to you if your healthcare professional feels that there is a chance that your baby will be born early.

The information provided in this leaflet aims to give you, your birth partner, relative or friend an explanation to support you in making decisions regarding your care and treatment. It should be given in addition to a detailed discussion with your health care team.

What are corticosteroids?

They are a type of medication that is given to help your baby if there is a chance that you may give birth early.

They are given as an injection into the large muscles of your upper thigh or arm in two doses over 24-48 hours.

Why do we give them?

When babies are born prematurely, they are at risk of developing several health problems which can be more serious the earlier they are born.

Giving the steroid injections can reduce the risk of

- Problems with their breathing
- Bleeding into their brain
- Developmental delay
- Reduced chance of death around the time of their birth if given within seven days

When do we give them?

Evidence has shown that babies born between 24-34⁺⁶ weeks benefit significantly from the administration of antenatal steroids.

You will be offered steroids if it is felt that you are going to give birth before 35 weeks. For instance:

- If you are in suspected or confirmed pre-term labour
- If your waters break even if you are not in labour
- If there is a benefit to either you or your baby to be born early. For example, if there are concerns that your baby is not growing well, or you have developed a condition in your pregnancy such as pre-eclampsia.

Between 35⁺⁰ and 36⁺⁶ weeks

There is less evidence around the benefit of steroids being given if you are predicted to give birth between 35-36⁺⁶ weeks. If they are being offered, you should have a full discussion with your doctor about the risk and benefits of receiving them.

Steroids at this gestation are likely to reduce the need for breathing support after birth but is also likely to increase the risk of a baby developing low blood sugars after delivery. There is limited evidence that they might also affect the baby's brain development, which can lead to a delay in achieving milestones or affecting their educational achievements in the future.

Elective caesarean section between 37-39 weeks

In the past we often gave antenatal steroids to women before an elective caesarean section if it was before 39 weeks. Although steroids may reduce admission to the Neonatal Unit (NNU) for breathing difficulties it is uncertain if there is any reduction in breathing difficulties or NNU admission overall. There is limited evidence that they might also affect the baby's brain development which can lead to a delay in achieving milestones or affecting their educational achievements in the future.

Less than 24 weeks

Steroids may be given if your baby is expected to be born between 22-24 weeks. However, this will be after a detailed discussion with both the neonatal team and obstetric team about the risks of your baby being born so prematurely.

For more detailed information on risks and benefits of antenatal corticosteroids see Appendix 1.

How long are they effective for?

Steroids have the most benefit if the last dose is given to you between 24 hours and seven days prior to the birth of your baby. There is still some benefit if the baby is born within the first 24 hours.

However, the benefits are likely to be significantly reduced if the baby is born after seven days. Therefore, it is important that we administer them at the right time.

Can steroids harm my baby?

Being given steroids between 22-35 weeks of pregnancy is likely to be safe and beneficial to your baby. However there have been no large-scale studies to research this further.

There is some research to suggest that babies born after 37 weeks who had steroids given between 22-35 weeks are at an increased risk of developing problems with their mental wellbeing later in life.

If given antenatal steroids after 35 weeks, there is a chance that your baby may have low blood sugar levels after birth. This can be harmful to your baby if not treated and they may need to be admitted to the neonatal unit if it develops.

Information for Patients

There is also some evidence of a link between use of steroids after 37 weeks prior to an elective caesarean birth and poor school performance.

Is there any risk of steroids to me?

A single course of steroids is known to be safe for you. You may develop some minor side effects such as pain at the injection site.

Steroids are known to increase your blood sugar levels. If you are diabetic or have developed gestational diabetes during your pregnancy, you will need to increase your blood sugar monitoring for 48 hours following administration of the steroids and you may need to be admitted into hospital for additional insulin treatment.

Can I have more than one course during my pregnancy?

If your baby is not delivered within seven days of the administration of the steroids, and there is still a chance that you will deliver prematurely, the benefit on your baby's breathing may mean a second course of steroids is given. Evidence to support this is limited and there is some evidence to suggest that your baby may be smaller than expected when they are born following a repeat course. Therefore, your doctor will discuss the risk and benefits of a second course with you depending on your situation.

When will I not be offered steroids?

If you are unlikely to give birth within the next seven days, you will not be given them as it is important that we give them if you are expected to deliver in the next seven days.

Further information

- <https://www.rcog.org.uk/media/ixbnd3t4/corticosteroids-in-pregnancy-large-print-patient-information-leaflet.pdf>


Appendix 1

USE OF ANTENATAL CORTICOSTEROIDS AT TERM, BEFORE PLANNED CAESAREAN BIRTH

Infographic supported by the Royal College of Obstetricians and Gynaecologists

WHO?

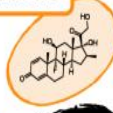
Steroids are sometimes offered to pregnant women due to have a **planned Caesarean birth** between **37 to 39 weeks** pregnant.



WHAT?


Steroids are naturally occurring **chemical messengers (hormones)** which are **essential for life**. We offer a man-made version of steroids to some pregnant women before birth to benefit the baby.

We know that steroids help premature babies (born before 37 weeks) with their breathing.




WHEN?

Steroids are given within the **week** leading up to the birth.



HOW?

Steroids pass into the mother's blood, then **cross the placenta**, to reach the baby.




WHY?

Babies born by planned Caesarean are more likely to have **difficulties clearing the fluid** in their **lungs** at birth, and are more likely to need to be admitted to the Neonatal Unit. This is an area which specialises in the care of unwell or premature newborn babies.

These risks are higher for babies born before 39 weeks.

Steroids probably reduce the chance that a baby born by Caesarean will need admission to the **Neonatal Unit** for breathing problems.



UNCERTAINTIES

Steroids are thought to be **generally safe** and have been used in Maternity settings for over thirty years, especially before premature birth. There is good evidence to show that steroids have benefits for babies born before 35 weeks.




However, there is **less evidence** on the benefits of steroids for babies born by Caesarean section after 37 weeks.

For babies born near their due date, by Caesarean section, it is still not clear if steroids can help to reduce breathing problems, or if steroids reduce the overall possibility a baby is admitted to a Neonatal Unit.

There is also some evidence that steroids given later in pregnancy might cause **low blood sugars** in baby after birth.

There is **less information available on longer-term effects** of steroids in babies, particularly those born near their due date.


Steroids given later in pregnancy might also affect a baby's brain development, leading to delay in reaching milestones or affecting educational achievement, however, the evidence for this is limited.




SIDE EFFECTS FOR MOTHER

- Nausea
- Pain at injection site
- Flushing
- Rise in blood sugar if diabetes


For more information scan here




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COPT



This infographic is based on RCOG Green-top Guideline No. 74: Stock SJ, Thomson AJ, Papworth S; The Royal College of Obstetricians, Gynaecologists. Antenatal corticosteroids to reduce neonatal morbidity and mortality. BJOG 2022; <https://doi.org/10.1111/1471-0528.17027>

Useful Telephone Numbers:

Heartlands Hospital
Solihull Hospital
Good Hope Hospital

0121 424 0928/ 0730
0121 424 4382
0121 424 9622

Our commitment to confidentiality

We keep personal and clinical information about you to ensure you receive appropriate care and treatment. Everyone working in the NHS has a legal duty to keep information about you confidential.

We will share information with other parts of the NHS to support your healthcare needs, and we will inform your GP of your progress unless you ask us not to. If we need to share information that identifies you with other organisations, we will ask for your consent. You can help us by pointing out any information in your records which is wrong or needs updating.

Information for Patients

Department address and contact information:

Please include address where appropriate along with contact telephone numbers if not already captured in the information above.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk