Treatment with Low Molecular Weight Heparin (LMWH) during pregnancy and after the birth of your baby

Low molecular weight heparin (LMWH) is given to women who are thought to have a higher chance of developing a blood clot during pregnancy or after the birth. This can be due to many different risk factors, which are regularly assessed by your midwife throughout your pregnancy and directly after the birth of your baby. Some women will be given LMWH as part of their treatment because of previous miscarriage, certain pregnancy complications, as a result of blood tests or if they have developed a thrombosis during the pregnancy.

Why is LMWH used?

During pregnancy the risk of blood clots is increased due to the normal changes occurring in the blood to prepare the body for childbirth. This causes the blood to become more ‘sticky’.

After the baby’s birth the risks remain high, as the mother’s body adapts to not being pregnant. It is important to continue LMWH treatment during this time. Some women will be started on LMWH just to cover the period after the birth.

What is LMWH?

LMWH is a modern type of heparin (a type of medicine called an anticoagulant). In Salisbury the most commonly used anticoagulant in pregnancy is called dalteparin. Sometimes it is also used to try to reduce the risk of miscarriage. Dalteparin has to be prescribed by a doctor, and is always given by injection into the fatty layer under the skin (subcutaneous layer).

When is LMWH given?

It is usually given once or sometimes twice a day.

Are there any risks associated with LMWH?

LMWH is considered to be safe to use in pregnancy. It poses no harm to your developing baby, as heparin does not cross the placenta. It is also considered safe to take while breast feeding.

The most common side effect for the mother is a small amount of bruising at the injection site. The risk of bleeding with low dose LWMH,
due to the ‘thinning’ of the blood, is small. LWMH doesn’t usually cause bleeding by itself, but bleeding caused by other things, for example from a threatened miscarriage, may be a little heavier than normal.

The old type of heparin (called ‘unfractionated heparin’) could sometimes cause osteoporosis (thinning of the bones). This is much less likely with modern heparin, but it is advisable to have plenty of calcium in your diet (for example from milk, cheese and yoghurt).

Around 5% of women experience a skin rash at the site of the injection.

**How do you give LMWH?**

The syringes come ready prepared with the correct dose. As it is not necessary to stay in hospital for the duration of the treatment you will be shown how to give your own injections, and most women, or their partners, manage this very easily. The needle on the syringe is very fine, and although the injection may sting slightly, it is not usually too painful. You will be given a sharps box (a strong plastic box just for used syringes) so that you can dispose of the syringes safely.

When the container is full to the line, close and lock it and give it to your GP, nurse, midwife or the hospital for disposal. Do not put it in the household rubbish.

- If you forget to take a dose and are close to your next scheduled dose, skip the missed dose and inject the next dose at the regularly scheduled time. Do not take a double dose.

**How should LMWH be stored?**

It does not need to be kept refrigerated. Store the LMWH syringes at room temperature (between 15 and 30ºC). It is important to keep the stock of injections and sharps box in a safe place, out of reach of children. You should ask for a new sharps box before the old one is completely full.

**Important**

**Is there anything I should look out for when I am taking LMWH?**

- Red spots under the skin which do not go away when you put pressure on them.
- You bruise more easily than usual.
- Your injection sites become red and itchy.

If you experience any of these symptoms please contact your GP or your midwife straight away.

**Can I take other medications whilst being treated with LMWH?**

Check with your doctor or pharmacist before taking any other medication. If you visit another doctor or dentist for treatment, be sure to tell them that you are being treated with LMWH.

**Should I use heparin while I am in labour?**

If you think that you might be in the early stages of labour, do not have any more injections. Ring the labour ward and explain that you are taking LMWH and they will advise you what you should
do. If you are booked for an induction of labour it is recommended that you stop the heparin injections approximately 12 to 24 hours before the time of your induction. This is dependent on the dose you have been prescribed, therefore, your doctor will advise you on when to stop the injections.

An epidural (which is an injection given into the space around the nerves in your back to numb the lower part of the body) will not be given within 12 hours to 24 hours of the last LMWH injection. Your obstetrician or anaesthetist will advise you on this. It maybe useful to discuss alternative pain relief with your midwife or doctor. In the event that you require an emergency caesarean section you may be offered a general anaesthetic.

If I am going to have a planned caesarean section, when should I stop the heparin injections?

Once you have a date set for your caesarean section, your obstetrician will advise you when to have the last injection. It is usually recommended to be 12 to 24 hours before the time of your admission to hospital. This is dependent on the dose you have been prescribed, therefore, your doctor will advise on when to stop the injections.

How can I help to reduce the risks of a blood clot after a caesarean section?

1. Get out of bed as soon as you can.
2. If you are unable to get out of bed, exercise your legs every hour:
   - Pump each foot up and down briskly for 30 seconds by moving your ankle
   - Move each foot in a circular motion for 30 seconds
   - Bend and straighten your legs—one leg at a time. Do this three times for each leg.
3. Take deep breaths. Every hour sit up straight and take a couple of really deep breaths.
4. Drink plenty of fluid. You should drink up to a glass of water every hour throughout the day, unless your doctor has told you otherwise.

Your doctor or midwife will also assess your risk of a thrombosis and you may be prescribed heparin injections and possibly graduated elastic compression stockings to reduce your risk. Also it is recommended that you resume treatment at least four to six hours after delivery.

How can I reduce the risks of a blood clot following a vaginal birth?

It is important to mobilise as soon as possible after having your baby and you should avoid becoming dehydrated. Your doctor or midwife will also assess your risk of a thrombosis.

If I was taking heparin before the birth of my baby what follow up should I expect to have?

If you were taking LMWH during the pregnancy you may be prescribed heparin injections for a period of time following the birth. It is recommended that you resume treatment at least four to six hours after delivery, unless otherwise advised by your doctor. You would need to continue
this for between 1 and 6 weeks afterwards. The medication may alter and an alternative may be recommended. In the event that a blood clot is diagnosed while you are pregnant, you may be advised that you need treatment for longer. Your doctor will discuss this with you.

After the birth you should have a postnatal appointment either with your GP, obstetrician or at the VTE Clinic. At this time your doctor should:

- Discuss future pregnancies and the need for heparin treatment during and after your next pregnancy, (Although LMWH treatment is given in very early pregnancy it is not recommended when planning a pregnancy. This is because of the uncertainty about the length of time it may take to conceive).

- Advice on reducing your lifestyle risk factors:
  - if you have a body mass index (BMI) of over 30 you will be advised to lose weight before you become pregnant again.
  - if you smoke you will be advised to stop smoking.

- Discuss the option of contraception. If you are taking heparin some contraceptive methods may not be recommended.