

Deep Vein Thrombosis:

Reducing the risk during pregnancy and after birth

Department of Gynaecology

What is Deep Vein Thrombosis?

Thrombosis is a blood clot that has formed in a blood vessel in the body. Veins are blood vessels that return blood from areas of the body back to the heart. A Deep Vein Thrombosis (or a DVT) is a blood clot that forms in one of the deep veins in the body, usually in the leg (calf or thigh) or pelvis.

Why is DVT a problem?

A DVT can cause blockage to the flow of blood in that vein which can cause pain, swelling and discomfort in the leg.

A DVT can be serious because part of the blood clot (embolus) can break off and travel up the vein, through the heart and into the lungs. The clot can then lodge in the blood vessels in the lungs and block the circulation of blood. This is called a Pulmonary Embolus (a PE) and can be life-threatening.

The symptoms of PE can include:

- Breathing difficulties which can occur suddenly
- Chest pains or a tight feeling in the chest
- Coughing up blood
- Feeling very unwell or collapsing.

How common are DVTs?

Being pregnant increases your risk of getting a DVT. This increased risk exists throughout your whole pregnancy, including the first three months, and lasts up to six weeks after the birth of your baby. The highest risk for you having a DVT is just after birth.

Fortunately DVT is still an uncommon event to happen in pregnancy and occurs in only one or two women in every 1,000.

What makes me at risk of DVT or PE?

Aside from pregnancy itself, there are certain situations and conditions that increase your risk of getting a DVT or PE. These are called risk factors. Your risk of getting a DVT or PE in pregnancy is higher with any of the following risk factors:

Before Pregnancy:

- If you are over 35 years of age
- If you have had three or more babies
- If you or members of your immediate family (parents and siblings) have had a previous DVT or PE
- If you have a medical condition that makes your blood clot more easily (thrombophilia)
- If you have been diagnosed with other medical conditions such as heart or lung disease or arthritis which increase your risk of having blood clots (your doctor or midwife will know which conditions these may be)
- If you have severe varicose veins that are painful or above the knee with redness and/or swelling
- If you are a wheelchair user.

Lifestyle

- If you smoke
- If you are overweight with a body mass index (BMI) of 30 and over
- If you use intravenous drugs
- If you have a sedentary lifestyle.

During Pregnancy

- If you are admitted to hospital
- If you are pregnant with more than one baby
- If you become dehydrated in pregnancy, for example, with vomiting in early pregnancy

- If you become unwell with conditions such as severe infection or kidney stones
- If you become less mobile for long periods of time for example after an operation or travelling distances longer than 4 hours by air, car or train
- If you become unwell from fertility treatment (Ovarian Hyperstimulation Syndrome)
- If you develop a condition called pre-eclampsia.

After your baby has been born

- If your labour was very long (more than 24 hours)
- If you have had a caesarean section
- If you lost a lot of blood during your delivery or required a blood transfusion.

How will my risk for DVT be assessed?

Your risk of getting DVT can change throughout your pregnancy so it is important that your risk is assessed throughout at various points:

Before Pregnancy

If you are planning a pregnancy and have any of the risk factors above you should have a discussion with your GP. You may need to be referred to see an obstetrician to discuss your risk of DVT prior to you getting pregnant or early on in your pregnancy.

If you have had a previous DVT and are already taking medicines to thin your blood, such as warfarin, you should ask your GP to be referred to an obstetrician who will advise on your blood thinning treatment through your pregnancy. You may also need to change your blood thinning medication from tablets to injections (heparin).

During and After Pregnancy

Your risk of getting a DVT will be assessed by your midwife at your booking appointment and again at your 28-week appointment.

If you are admitted to hospital or you develop any of the risk factors above, a risk assessment will be repeated by the doctor or midwife looking after you.

After your baby is born your risk will be assessed again.

How do I reduce my risk of getting a DVT or PE?

To reduce your risk of getting DVT:

- Stay well hydrated by drinking regular amounts of fluid
- Stay active throughout your pregnancy
- Wear special stockings (Graduated Compression Stockings)
- Stop smoking.

What is DVT prophylaxis?

DVT prophylaxis is medication to thin the blood (anticoagulant) to help prevent blood clots developing. This is normally with a medication called heparin. The name of heparin used at BSUH is called Enoxaparin.

Heparin is also used as treatment for DVT but much higher doses are used in this situation.

When is DVT prophylaxis started?

DVT prophylaxis is usually started after a risk assessment for you developing a DVT has been made by your doctor or midwife. This assessment can happen at any point throughout your pregnancy or after your baby has been born. The doctor or midwife will discuss the assessment with you, the reasons why DVT prophylaxis has been recommended for you and will answer any questions you may have about it.

How is DVT prophylaxis given?

Heparin is given as an injection under the skin. It is usually given at the same time each day and mostly is given once a day, although you may need twice-daily injections based on your risk assessment.

The dose of heparin that you need is calculated on your weight from your booking appointment with your midwife and the risk factors that you have.

You (or a family member) will be shown how to give the injections. You will be provided with the needles and syringes which are pre-made and you will be taught on how to safely store and dispose of the injections.

How long will I be on DVT prophylaxis?

The risk assessments that you have before and during pregnancy and after the birth of your baby will guide how long you need to be on DVT prophylaxis for.

A clear plan for stopping your DVT prophylaxis will be made with you along with any reasons you should stop it earlier than planned. This could be for situations such as if you needed to have an operation or if you developed any bleeding.

Are there any risks to me or the baby?

The heparin injections cannot harm your baby as they do not cross the placenta.

You may develop some bruising at the site where you inject.

As with any medication there is a change of having an allergic reaction. This happens to 1 or 2 in every 100 women. If you do develop a rash or any new symptoms after your injection you should inform you doctor so a different type of medication can be given.

Are there any effects of DVT prophylaxis on my labour and delivery?

If you think you are going into labour do not inject any more heparin. Phone Maternity Triage and let them know you are on heparin injections. They will give advice on what to do next.

If you are having a planned Induction of Labour you will be advised on when to stop your injections before your planned date.

If you are having a planned Caesarean Section your obstetrician will make a plan about when to stop your injections before your planned date.

If you are in labour and would like an epidural (pain relief that is given as an injection into the nerves in your back), you cannot have this until 12 hours have passed since your last heparin injection. Alternative pain relief will be provided in the meantime.

What happens with my DVT prophylaxis after birth?

You will have another risk assessment from your midwife or doctor. Your midwife or doctor will advise on whether DVT prophylaxis is needed and how long for.

If you do need to have heparin injections after birth it is safe to breastfeed.

When you go for your 6-week postnatal appointment with your GP they will have a discussion with you about contraception. You may be advised to avoid certain types of contraception that have an increased risk of DVT such as the combined oral contraceptive pill.

Reference: RCOG Patient Information Leaflet: Reducing the Risk of Venous Thrombosis in Pregnancy and after birth. August 2015

Produced by Ward Sister Samantha Backley

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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