Diagnosis and Treatments of Blood Clots in Pregnancy and After Birth (Venous Thromboembolism)

Obstetrics and Gynaecology
Women and Children’s Group

This leaflet has been designed to give you important information about your condition / procedure, and to answer some common queries that you may have.
Introduction

It is natural for blood to clot, however sometimes blood clots develop in the wrong places which can be harmful. If a clot occurs in a vein, usually in the deep veins of the leg (known as a deep vein thrombosis or DVT), it can cause pain and swelling. If a clot flows along with the bloodstream, it is then known as an embolus. If it reaches the lung it is known as a pulmonary embolus (PE). This can cause pain and they can be dangerous or potentially life threatening if they interfere with lung function. At booking or on admission, you will be assessed for your risk of developing a VTE.

Benefits

Women are ten times more likely to develop a venous thrombosis when they are pregnant and for a short while thereafter. This is due to the changes from being pregnant.

Some patients are more at risk of developing thrombosis, for example if they:
- have had a previous venous thrombosis
- have a condition called thrombophilia, which makes a blood clot more likely
- are over 35 years of age
- are overweight – body mass index (BMI) over 30
- are carrying more than one baby
- currently have severe pre-eclampsia (raised blood pressure)
- have just had a caesarean delivery
- are immobile for long periods of time
- are a smoker

It is important to see your GP or Midwife urgently if you think you have a DVT or PE as it can be dangerous.

Diagnosing Thromboses (Blood Clots)

A thrombosis in the veins of the leg (a DVT) will typically cause redness to the leg, it may become swollen and it may be painful to stand on.

If your GP or midwife suspects you may have a DVT, you will probably need an ultrasound scan of the veins in your leg to identify any clots.

A thrombosis which flows along with the bloodstream (an embolus), may reach the lung (PE) and will typically cause either gradual or sudden breathless, tightness in your chest which may be worse when you breathe in, sudden collapse or coughing up blood.

Seek help immediately from your midwife or GP if you experience any of these more serious symptoms. If a clot is suspected you are likely to be offered an ultrasound scan of the leg and possibly a chest X-Ray, a lung perfusion scan or a CT scan.

Both DVT and PE are serious conditions that require urgent investigation and treatment.

Treating Blood Clots

Thromboses (DVTs and PEs) are treated using a blood thinning injection called heparin, the same drug that is used to prevent them, although usually at a higher dose which is dependent on your weight. Heparin is given by injection, usually once a day. The most common heparin used in this hospital is given by self-injection into the abdomen. You will be shown how to do this by the Midwife or Nurse. Heparin reduces
the ability of blood to clot and works to prevent the clot from getting any bigger so your body can gradually dissolve the clot. Such treatment prevents DVTs becoming PEs and usually needs to be used throughout pregnancy and for 6 weeks thereafter. In addition compression stockings will be provided and women will be advised to wear them.

The minimum treatment time is three months. Heparin is made from animal products. Synthetic alternatives may be available if you are concerned about this, and your healthcare team should discuss the suitability, advantages and disadvantages of the available treatment options with you.

You will be taught how and where to inject yourself. Inform your midwife or GP if you have any problems injecting yourself.

Oral blood-thinning medications (like Warfarin) should be avoided during pregnancy because they can reach your developing baby introducing risks for development and birth. The heparin injection does not reach your baby or newborn and is therefore much safer. After the birth, your doctor may consider changing you to Warfarin, as it is not present in breast milk in significant amounts.

Are there any risks with having the tests?

Ultrasound scans are quite harmless to mother and baby.

Chest X-rays can be taken with the baby shielded with lead. They pose no risk to the baby.

A lung perfusion scan uses radiation. Research shows that the risk of a baby exposed to such a scan developing cancer in childhood is 1 in 280,000 (0.00035%). This is an extremely low risk.

A chest CT scan raises the chance of a mother developing breast cancer from 0.05% to 0.068%. This increase is considered carefully in judging who is most likely to benefit from this test.

Are there any risks to me and my baby from heparin?

Heparin does not reach the baby and therefore doesn’t cause harm.

There may be some bruising where you inject which will usually fade in a few days.

If you notice a rash after injecting, you should inform your doctor so that the type of heparin can be changed.

Contact your doctor if you experience any worrying symptoms when you are taking heparin (such as chest pains, unexpected bruises or a sudden change in your health or if you have any heavy bleeding).

Labour and Delivery

Women taking heparin should stop taking it when they think they are starting labour. Epidural pain relief cannot usually be used within 24 hours of a heparin injection. Heparin should be stopped 24 hours before an elective caesarean section.

After birth

Heparin is usually continued for 6 weeks after birth although there is the option of changing to Warfarin tablets. Neither will interfere with your ability to breastfeed. If you suffer a thrombosis during pregnancy you will be advised to wear compression stockings on your legs – these reduce the
possibility of long term pain in the affected vein. You will also need to discuss:

- further investigations to exclude conditions which predispose to thrombosis
- how this clot affects your choice of contraceptive
- whether you will need treatment to prevent a thrombosis in your next pregnancy

**Reference Section**

Royal College of Obstetricians and Gynaecologists Green Top Guidelines – “37a; Reducing the Risk of Thrombosis and Embolism During Pregnancy and the Puerperium” and “37b; The Acute Management of Thrombosis and Embolism During Pregnancy and the Puerperium”.

**Contact details for Further Information**

Contact your midwife if should you require additional information. The Midwife Team telephone number is on the front of your hand held records which you should carry with you at all times.

**Concerns and Queries**

If you have any concerns / queries about any of the services offered by the Trust, in the first instance, please speak to the person providing your care.

**For Diana, Princess of Wales Hospital**

Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01472) 875403 or at the PALS office which is situated near the main entrance.

**For Scunthorpe General Hospital**

Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01724) 290132 or at the PALS office which situated on C Floor.

Alternatively you can email: nlg-tr.PALS@nhs.net

**Northern Lincolnshire and Goole NHS Foundation Trust**

Diana Princess of Wales Hospital
Scartho Road
Grimsby
01472 874111

Scunthorpe General Hospital
Cliff Gardens
Scunthorpe
01724 282282

Goole & District Hospital
Woodland Avenue
Goole
01405 720720

www.nlg.nhs.uk

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