

Cancer Associated Thrombosis

This leaflet explains about thrombosis associated with cancer or its treatment. If you have any further questions or concerns, please do not hesitate to contact your oncology consultant, clinical nurse specialist, the acute oncology service or the Haemostasis and Thrombosis Centre.

What is deep vein thrombosis (DVT)?

This is a blood clot that has formed in one of the deep blood vessels, most commonly in your leg or pelvis but it can also occur in any deep veins, such as in your abdomen or your arm. It may cause no symptoms at all or it may cause swelling, redness and pain.

What is a pulmonary embolism (PE)?

If part of the clot becomes dislodged and passes through your blood vessels it can reach your lungs. This is called a pulmonary embolism (PE). Symptoms include coughing, chest pain and gradual or sudden onset of breathlessness. It can potentially be a serious or life-threatening condition.

Health professionals use the term venous thromboembolism (VTE), to cover both DVT and PE.

Both deep vein thrombosis and pulmonary embolism may occur in patients with cancer, especially those undergoing treatment for cancer such as surgery, chemotherapy or radiotherapy. Indeed it is a little known fact that about one in ten cancer patients will have an episode of VTE during the course of their illness.

How are DVT and PE treated?

If you have a VTE, your doctor will prescribe you an anticoagulant, which is a medicine that prevents the blood from clotting as quickly as normal. The anticoagulant will stop the blood clot getting any larger.

For patients with cancer or receiving treatment for cancer, we usually use a low molecular weight heparin, which is given as an injection (at Guys and St Thomas' this will be dalteparin, also known as Fragmin®). We use low molecular weight heparin in preference to any other anticoagulant because it is the most effective at reducing the risk of recurrent VTE in those with cancer, and also because it doesn't interfere with cancer treatments.

How are the anticoagulant injections given?

These injections are given usually once per day. Occasionally some patients may require them twice per day, but your doctor will advise you how many times a day you require injections.

These injections can be self-administered or given by someone else at home and the nurses will show you how to do this. For the few patients that are not able to self-administer injections, arrangements will be made by your healthcare provider for district nurses to come in and give the injections.

Are there any side effects of the anticoagulant medicines?

All medicines which prevent the blood from clotting as quickly as normal are associated with a risk of bleeding. Please seek medical attention if you should develop any prolonged or excessive bleeding or sustain a head injury.

You may notice some bruising of the skin around the injection sites, this is normal.

Occasionally patients have allergic reactions to heparin injections, which can show itself as an itchy rash and later swelling in the skin around the injection site. If you think you have had a reaction you must let your team know immediately.

Very rarely, heparin may make your blood platelet count drop (called heparin-induced thrombocytopenia). Your blood count will be monitored during treatment and if this is suspected the heparin will be switched to another anticoagulant medicine. Please remember though that there may be other causes for your platelets to fall, including treatments for your cancer, so please do not be alarmed if this happens.

Do I need monitoring of my heparin injections?

Most patients do not require monitoring of the effect of the injections because they have a highly predictable effect on blood thinning.

However your blood count and kidney function will be monitored during heparin treatment. This is because in some patients undergoing chemotherapy or radiotherapy, the platelet count or kidney function may change and this may mean you need a change in your heparin dose.

How long do I need anticoagulant medicine for?

The current recommendation is that patients that develop a thrombosis associated with cancer or its treatment receive a **minimum of six months of anticoagulant therapy**. This is usually with low molecular weight heparin (dalteparin) injections. At the end of six months, the need for ongoing anticoagulation treatment will be reviewed. Your anticoagulation may be stopped altogether or you will be put on an anticoagulant medicine to protect you from further blood clots if you are felt to be at increased risk of another thrombosis.

Patients who develop thrombosis associated with an indwelling vein catheter such as a PICC (peripherally inserted central catheter) line require a shorter treatment period of three months (or less if the line is removed).

My oncologist/surgeon says I need an operation, is that OK?

Having a thrombosis does not stop you having surgery if required. However, the timing of your surgery may need to be changed to make the surgery as safe as possible.

A 'bridging plan' will be made which tells the doctors how and when to give your anticoagulant medicine around surgery. This is usually done by a thrombosis doctor, anticoagulation nurse, pharmacist or the surgical team.

Can I travel by airplane/go on holiday with a blood clot?

We would recommend that you do not fly for four to six weeks following the diagnosis of your clot. Following this you may travel by plane, though may require a letter for customs to allow you to carry your injections aboard. Please speak with your nurse or GP regarding a letter for travel.

Is there anything I need to do at home?

If you need a painkiller, paracetamol is safe to take. **Aspirin and non-steroidal anti-inflammatory drugs, such as ibuprofen**, will increase your bleeding risk and should be used with caution, on medical advice.

When do I need to seek immediate medical attention?

You must seek immediate medical attention if you have symptoms suggesting you have a new clot (rarely happens on anticoagulation)

- chest pain or breathlessness
- coughing or vomiting blood
- increased leg swelling or pain

You must also seek immediate medical attention if you develop any problems with bleeding as mentioned above.

Contact us

If you have any questions or concerns, please contact the Acute Oncology Service on **020 7188 3754** (Monday to Friday, 8:30am to 6:30pm)

Outside of these hours, your call will be diverted to switchboard (020 7188 7188). Please ask for the On Call Oncology Registrar, or the Haemostasis and Thrombosis Centre **020 7188 2781** (Monday to Friday, 9am to 5pm)

Guy's and St Thomas' hospitals offer a range of cancer-related information leaflets for patients and carers, available at www.guysandstthomas.nhs.uk/cancer-leaflets. For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets



Dimbleby Cancer Care provides cancer support services for Guy's and St Thomas'. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy's. **t:** 020 7188 5918 **e:** DimblebyCancerCare@gstt.nhs.uk

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the clinical nurse specialist or other member of staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

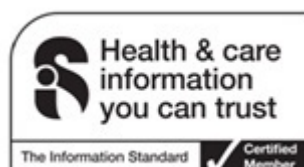
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