

Dialysis Line Insertion - Information for patients

This leaflet aims to answer some of the questions you may have about having a dialysis line insertion. It explains the risks and the benefits of the procedure and what you can expect when you come to hospital.

If you have any questions or concerns, please do not hesitate to speak to the staff caring for you.

What are dialysis lines?

A dialysis line is a fine plastic tube that is placed into a vein (blood vessel) and held securely in position by a stitch or cuff. It is used when your kidneys are not working properly to filter waste products from your blood. It takes blood and passes it through a machine (haemodialysis), before returning it back into the body via the line again with the waste products removed.

They can be tunnelled or non-tunnelled, and can be inserted via the neck, upper chest or groin. Tunnelled lines are permanent and tunnelled underneath the skin across the front of the chest or thigh. Non-tunnelled are temporary solutions for short-term dialysis. They are not tunnelled under the skin.

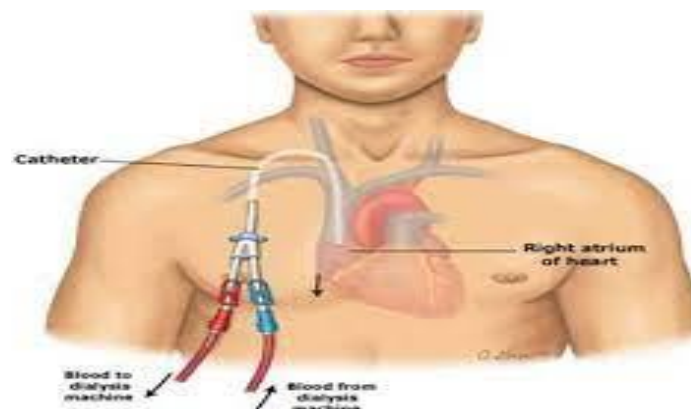
What are the benefits of having a dialysis line?

Tunnelled:

- Can be used immediately after insertion
- Lower risk of infection
- Lower risk of line migration (moving out of vein)
- No general anaesthetic required

Non-tunnelled:

- Can be used immediately after insertion
- Quick immediate solution for short-term dialysis
- No general anaesthetic required



What are the risks of having a dialysis line?

A dialysis line insertion is a very safe procedure, but as with any medical procedure there are some risks and complications that can occur. The radiologist will explain these to you before the procedure. Below is a list of some possible risks:

- Pain/bruising at puncture site (usually settles in 24hours. Pain relief can be taken e.g. paracetamol)
- Bleeding from exit site (increased risk if you are taking blood thinning medication – aspirin, clopidogrel or warfarin)
- Kinks in the line – usually just needs re-positioned
- Infection – the risk is low and can generally be treated satisfactorily with antibiotics, but occasionally the line may need removed
- Blockage of line – if a blood clot is blocking the line, medication can be given through it to unblock it. Blood thinning medication may be required if you have a blood clot in the vein
- Pneumothorax – the lung is very close and may be inadvertently punctured. You may get pain or have difficulty breathing. It usually resolves on its own, but occasionally another procedure is required to allow air to escape and the lungs to re-inflate

Contrast

Dialysis line insertion may use x-ray dye (contrast), and very rarely, a reaction may occur. If you have ever had a test that uses x-ray dye and you have had a reaction to it, you should tell the doctor or nurse before you have your dialysis line insertion. A reaction may take the form of a rash or itching and very rarely, a more severe allergic reaction can occur. The team are trained to deal with this and have measures in place to deal with this safely should this occur.

If you have had a previous reaction, please let us know, and we can put measures in place to minimise risk from another reaction.

Radiation – Benefit versus Risk

X-ray radiation is required for a dialysis line insertion. The radiation dose that you get during this procedure is small and the associated risks are low. Clinical staff consider both the risks and benefits when deciding what procedure is appropriate for you. The benefits of having the procedure outweigh any risk. Clinical staff are responsible for making sure that the dose you receive is kept as low as necessary to aid your diagnosis or treatment.

Pregnancy

If you are in the early stages of pregnancy there is a very small risk of x-rays harming your unborn child. If you think you could be pregnant, or you are trying to get pregnant, please tell us before your appointment. Individuals aged 10-55 will be asked to confirm their pregnancy status by the radiographer before the procedure and asked to sign a form.

Are there any alternatives?

Your referrer has decided that dialysis line insertion would be the most useful in your case. The examination will help your referrer to assess you more fully and plan any further treatment that might be necessary. If you would like more information about alternative imaging tests, please speak to the doctor or health care professional managing your care.

Before your procedure:

Pre-assessment

Pre-assessment is not required

Fasting

You may be asked not to eat for 4 hours before the procedure.

What happens before the procedure?

Please attend the appropriate department as stated on your appointment letter (usually Day of Surgery).

When you receive your letter, please let us know if you have any of the following:

• Severe allergies?
• Have you had a previous adverse reaction to x-ray dye before?
• Asthma, which is poorly controlled?
• Renal impairment (poor kidney function)?
• Diabetes, which is treated with Metformin therapy?
• Are taking any anti-coagulants (blood thinners)?

You will be asked to change into a hospital gown and a small cannula (thin tube) will be inserted in your arm. You will be brought to the Interventional suite in your bed, where you will be met by a team of nurses, a Radiographer and an Interventional Radiologist.

Consent

We want you to be involved in all the decisions about your care and treatment. The Interventional Radiologist will ask you if you are happy for the procedure to go ahead. This is called verbal consent. If you do not wish to have the procedure or are undecided, please tell the Radiologist. Students/trainees may be present during the examination but only with your verbal consent.

Please remember that you can ask the Interventional Radiologist any questions you have at any time before, during or after your scan.

What happens during the procedure?

You will be help to transfer onto the X-ray table and monitors attached to record heart rate and blood pressure. You will be awake for the procedure.

The skin will be cleaned with antiseptic, sterile drapes will be over you, and the line insertion site is numbed with local anaesthetic (this will sting for a short while). A light sedative can also be given if needed (you will need accompanied home if you get this). Using ultrasound guidance a small needle will be placed accurately into the vein (neck or groin). Once in position, a guidewire is placed through the needle to allow the line to be guided into position.

For non-tunnelled lines, the position is checked with x-rays and the guidewire removed, before the line is secured in place with a stitch. A small amount of X-ray dye is sometimes injected to confirm the position of the line.

For tunnelled lines, the guidewire is removed and the line is 'tunnelled' under the skin to exit at the upper chest wall or thigh. They are held in place with a stitch and covered with a dressing.

As you are numbed with local anaesthetic, you should not feel any pain. You may feel some pushing/pulling sensations while the line is being tunnelled.

What happens after your procedure?

Once the procedure is completed you will return to the Day of Surgery Unit/ ward for nursing staff to monitor you post procedure. You can usually eat and drink normally, unless told not to. You will generally go home later that day. Always be careful to avoid dislodging the line.

Aftercare following discharge

An adult must stay with you during the 24 hour period following discharge in the unlikely event of complications. Please have this arranged in advance.

You cannot drive yourself home or use public transport, again, please arrange this advance of your appointment. If you do not have anyone to drive you home, the Trust can help.

Please rest at home for 24 hours.

Do not exercise, lift heavy items or consume any alcohol during this period.

What to do when you get home

Taking care of your dialysis line:

- Use a waterproof dressing when showering to keep it dry. Do not submerge in water (bath or swimming) to avoid infection
- Depending on your treatment plan you may need your line flushed regularly to avoid blockage
- Inform a nurse or doctor immediately if you experience a cold/shivery attack during or after flushing of the line as it could be a sign of serious infection that needs treated immediately
- Inform your doctor/nurse if the line gets damaged, you develop any redness on the surrounding skin or you notice your line becomes loose at the skin

When will I get the results of the procedure?

You may be able to discuss your procedure with the performing Interventional Radiologist once it is complete. The performing Interventional Radiologist will formally report on your procedure, and it will be attached to the images on our Radiology Information System (RIS). A copy of the report will be sent by Radiology to the referring clinician. The referring clinician will arrange any follow up.

Image sharing

Your images will be electronically stored on the hospital picture archiving system. This data can be accessed throughout the Belfast Health and Social Care Trust and other doctors and health care professionals who are directly involved in your care. The ability to share images and radiological reports will improve the safety and quality of your care by ensuring that the right information is available in the right place at the right time.

In order to improve the medical services we provide we may also use your data as anonymously as possible for internal audit and medical education. If you would prefer that your data is not used for these purposes, please inform a member of staff when you attend for your examination.

If your data is to be used for research, then a separate consent process will be used. You will be asked for your consent, should this be the case.

Contact us

If you have any queries, we will be happy to answer any questions before or after your procedure and you can contact us on the number given on your appointment letter.

For procedures performed at the Royal Victoria Hospital, please email InterventionRadRVH@belfasttrust.hscni.net Tel: 02896156661 Interventional Radiology Secretary RVH

For procedures at the Belfast City Hospital, please email InterventionRadBCH@belfasttrust.hscni.net Tel: 02895041165 Interventional Radiology Secretary BCH

Further information can be accessed on the British Society of Interventional Radiology patient portal: https://www.bsir.org/patients/what-is-interventional-radiology/#col_right



Feedback

We hope you found the information in this leaflet helpful. If it did not tell you what you needed to know or you would like to provide any feedback on your experience please let us know so that we can make any necessary improvements.

You can provide feedback on your experience:

Telephone: **028 9504 8000** (Monday-Friday: 9am-4pm)

Textphone: **18001 028 950 48000**

By email: compliments@belfasttrust.hscni.net

By email: complaints@belfasttrust.hscni.net

By completing an online form: <http://www.belfasttrust.hscni.net/contact/FeedbackForm.htm>

Care Opinion



We invite you to share your experience by clicking the following link:
<https://www.careopinion.org.uk/>

or by scanning the following QR code on your smartphone or tablet:



Language and accessible support services

Deaf/Hard of Hearing

If a Sign Language interpreter is required, please either telephone **028 9615 8900** via the Sign Video remote interpreting service (<https://signvideo.co.uk/deaf-community/>) or email us at MPHAdminFOH@belfasttrust.hscni.net and we will arrange one for your appointment. Please have your H&C number ready when calling or include it in your email. This can be found at the top right corner of any Health and Social Care letters you may have received.

If you are unable to hear on the phone and need to contact us with regards to your appointment you can email us at MPHAdminFOH@belfasttrust.hscni.net.

Do you need this information in another format or language?

The Trust has access to interpreting and translation services. If you need this information in another language or format, including Braille, large print, CD, audio tape please contact the telephone number **028 9615 8900** or e-mail address MPHAdminFOH@belfasttrust.hscni.net, and we will do our best to meet your needs.

Polish - Czy potrzebujesz tych informacji w innym formacie lub języku?

Fundusz ma dostęp do usług w zakresie tłumaczeń ustnych i pisemnych. Jeśli potrzebujesz tych informacji w innym języku lub formacie, w tym w piśmie Braille'a, dużym druku, na płycie CD, kasecie magnetofonowej, skontaktuj się z nami pod numerem telefonu lub

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adresem e-mail **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**, a my dołozymy wszelkich starań, aby spełnić Twoje potrzeby.

Arabic - هل تحتاج هذه المعلومات بصيغة أو بلغة أخرى؟

تستطيع الجمعية توفير خدمات الترجمة الفورية والتحريرية. إذا احتجت هذه المعلومات بلغة أو بصيغة أخرى، بما فيها صيغة برايل Braille أو صيغة بالأحرف الكبيرة، أو في سي دي CD أو في شريط مسموع، يُرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**، وسوف نبذل قصارى جهدنا في تلبية احتياجاتك.

Lithuanian - Ar jums reikia šios informacijos kitu formatu ar kalba?

Tarnyba gali suteikti vertimo žodžiu ir raštu paslaugas. Jei reikia šios informacijos kita kalba ar formatu, įskaitant Brailio raštą, didelį šriftą, kompaktinį diską, garso įrašą, skambinkite telefonu arba susisiekite el. paštu **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900** ir mes padarysime viską, kad patenkintume jūsų poreikius.

Romanian - Aveți nevoie de aceste informații într-un alt format sau altă limbă?

Trustul are acces la servicii de interpretariat și traducere. Dacă aveți nevoie de aceste informații într-o altă limbă sau într-un alt format, inclusiv Braille, tipărire cu caractere de mari dimensiuni, CD, înregistrare audio, atunci vă rugăm să ne contactați la numărul de telefon sau la adresa de e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, iar noi vom face tot posibilul pentru satisfacerea necesităților dumneavoastră.

Tetum - Ita presiza atu informasaun ida ne'e iha formatu ka lian seluk ka lae?

Fidusiáriu ida ne'e iha asesu ba servisu durubasa no tradusaun. Se Ita presiza informasaun ida ne'e iha lian ka formatu seluk, inklui letra Braile, letra boot, CD, kasete audio, entaun favór telefone número ka enderesu e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, no ami sei halo esforsu tomak atu kumpre Ita-nia nesesidade sira.