

## Prostate artery embolisation - Information for patients

This leaflet aims to answer some of the questions you may have about having a Prostate Artery Embolisation (PAE). 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 is Benign Prostatic Hyperplasia (BPH)?

The prostate gland surrounds the outlet of a man's bladder. BPH, also called prostate enlargement, is a noncancerous increase in size of the prostate gland. It is a very common condition in older men. By the age of 70, approximately 80% of men have an enlarged prostate. As the prostate enlarges, the layer of tissue around it stops it from expanding, which causes the gland to press against the urethra (the passage through which urine flows). In many men this presents no problems but if symptoms do occur they may include:

- Weak urine flow
- Hesitancy in passing urine
- Sensation that the bladder is not empty after passing urine
- Increased frequency in passing urine

### What is PAE?

PAE is a non-surgical, minimally invasive way of treating an enlarged and troublesome prostate by blocking off the arteries that feed the gland and make it shrink.

### Why is PAE required?

Other tests that you have had done will have shown that you are suffering from and enlarged prostate and that this is causing you considerable symptoms. Your doctor will explain the reasons why they think you should have a PAE.

### Who carries out the procedure?

A PAE is carried out by an Interventional Radiologist, who will be supported by a radiographer and nursing team. All are trained professionals in this type of procedure.

### What are the benefits of PAE?

PAE is a new procedure which is considered when other forms of treatment are deemed unsuitable or high risk. The procedure has only been carried out in a few thousand patients worldwide but early results are encouraging. The majority of patients who have had it done show a reduction in the size of the prostate and improvement of their symptoms.

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## Are there any alternatives?

Treatment is not always necessary for BPH, however, if you do need treatment there are several options which your urologist will discuss with you including surgery or medications.

## What are the risks of PAE?

A PAE is a relatively new procedure. From the limited published data, it appears to be safe, but there are some risks and complications that can arise, as with any medical treatment. The radiologist will explain these to you before the procedure. Below is a list of some possible risks:

- Any procedure involving placement of a catheter inside a blood vessel (artery) carries certain risks such as bruising or bleeding at the puncture site, however the chances of this are very small.
- There is a risk of infection but this can be treated with antibiotics
- Very rarely there is a chance that small particles can lodge in the wrong place and deprive normal tissue of its blood supply. In an attempt to avoid these complications, the doctors pay close attention to the pattern of the blood vessels in the pelvis, noting their path can be different in each individual. Despite this there is a very small risk of injury to the bladder, rectum and genitals because of their close proximity to the prostate.
- Occasionally patients may have an allergic reaction to the x-ray contrast dye used. These can include mild itching to severe reactions that can affect breathing and blood pressure. Patients undergoing prostate embolisation are carefully monitored during the procedure so any reaction can be treated immediately.
- There is also the possibility that the procedure may fail due to an inability to embolise the arteries completely or a failure of response to the treatment.

## Contrast

PAE uses 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 PAE. 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

PAE uses X-ray radiation. The radiation dose that you get from a PAE is small and the associated risks are low. Clinical staff consider both the risks and benefits when deciding what examination is appropriate for you. The benefits of having the PAE 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.

## Consent

We want you to be involved in all the decisions about your care and treatment. If you choose to go ahead, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand everything involved. 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.

## Pre-assessment

Pre-assessment is not required

## Fasting

You will probably be asked not to eat for 6 hours beforehand, though you may be allowed to drink some water.

## What happens before the procedure?

Before your appointment imaging of the prostate is performed to fully check the size and to assess the blood supply. This is usually done with an ultrasound and a CT scan or MRI organised by your urologist. You will also require a blood test before the procedure. You need to be admitted to hospital for the procedure which can be done as a day case or with an overnight stay.

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 changed 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 (doctor). The procedure will be explained to you by the radiologist and you will be asked to sign a consent form. The Royal Victoria Hospital is a teaching hospital and as such university students may be in attendance, with your permission.

## What happens during the test?

You will be helped to transfer onto the X-ray table and monitors attached to record heart rate and blood pressure. You will be awake for the procedure but you may be given a sedative, which will relax you and make you feel sleepy but the majority of these cases are done under local anaesthetic alone.

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The procedure is carried out through an artery in your groin. The area will be cleaned and you will be draped in sterile gowns. The radiologist applies local anaesthetic to the area so that you will not be able to feel what is going on. Once the area is numb, a very thin flexible tube called a catheter is introduced into the artery. This will allow the radiologist to take pictures of the prostate arteries. Only when the catheter is precisely positioned does the radiologist inject fluid, containing tiny particles, through the catheter. This flows into the prostate arteries and blocks them off. They will remain in your body permanently. At the end of the procedure the catheter is removed and the radiologist will use a closure device or press on your skin for a short time to stop bleeding from the small puncture hole made in the artery, which will heal completely within a few days.

### Will I feel any pain?

You will not feel any pain during the procedure. Most patients feel some pain afterwards; this is usually mild and you can be given pain relief. Very occasionally a urinary catheter may need to be placed.

### What happens after the procedure?

Once the procedure is completed you will return to the recovery area for nursing staff to monitor you post procedure. You will need to lie flat for 4 hours. It is common to experience bruising where the artery was punctured. This will normally be sore for a few days. You will have minor pain and cramping in the first few hours. You can usually go home the same day but will need someone to take you home. You should rest for three to four days at home and avoid strenuous activities.

### What do I need to look out for after I go home?

At home you may eat and drink as normal and continue with your normal medication unless instructed otherwise by the doctors. Keep a check on the puncture site and do not drive or do strenuous exercise for 48 hours after the procedure to allow it to heal properly.

**Bleeding or swelling is rare. Should this occur, lie down and apply pressure directly to the site for 10 minutes. If it persists after 10 minutes you should go to your nearest A&E department.**

You may feel tired and we advise you to rest for one to two weeks depending on the speed of your recovery. You can then go back to work and resume your usual activities.

Continue with any medication as usual, but if you take any diabetes medicines containing Metformin, please do not take them for the first two days after your procedure.

You may notice a very small amount of blood in your stool or urine. If this becomes excessive and you have worsening pain and/or temperature you should contact your doctor as soon as possible.

## Results

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. Any follow up will be arranged by the referring clinician.

## 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.

## 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](mailto:compliments@belfasttrust.hscni.net)

By email: [complaints@belfasttrust.hscni.net](mailto: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](mailto: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](mailto: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](mailto: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 adresem e-mail **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**, a my dołożymy 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 **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**، 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](mailto:MPHAdminFOH@belfasttrust.hscni.net) / **028 9615 8900** ir mes padarysime viską, kad patenkintume jūsų poreikius.

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### **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 Braille, 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.