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Radioactive Synovectomy in Haemophilia

Information for patients

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This leaflet answers common questions about radioactive synovectomies. If you would like further information or have any worries, please do not hesitate to ask your specialist haemophilia team.

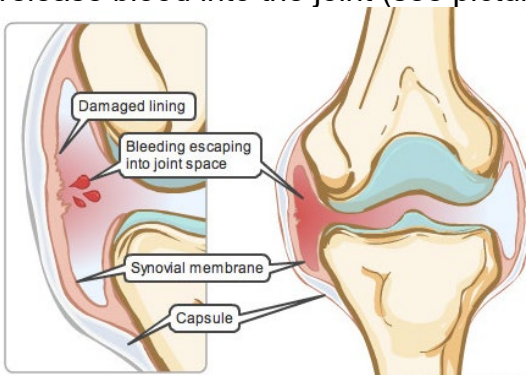
In all cases, your healthcare professional will explain the procedure to you and answer any questions you may have. In most cases it will be possible for a friend or relative to accompany you for all or part of the procedure. Please ask your specialist clinicians.

What is a Radioactive Synovectomy?

Most joints in the body contain a lining called the synovium. In a normal healthy joint the synovium:

- Provides lubrication for joint movement
- Provides nutrition for the cartilage in the joint
- Helps to remove waste material from day-to-day use of the joint.

To do this well, the synovium has a very good blood supply. This can mean that in haemophilia, if the lining gets caught it can release blood into the joint (see picture below).



After repeated bleeding episodes the synovium layer thickens which makes it more prone to getting caught or nipped between the joint. Over time, this causes a cycle of bleeding and synovitis (inflammation of the synovium) which leads to more blood vessels growing into the thickened synovium.

This overgrown synovium can be painful, limit joint movement and damage the health of the cartilage and bone in the joint.

Radioactive synovectomy

A radioactive synovectomy is a process that aims to reduce the cycle of bleeding and inflammation by shrinking the thickened synovium and sealing some of the blood vessels through a process of fibrosis and sclerosis (scar formation).

People may feel concerned hearing the term ‘radioactive’. In medical terms this simply means a radioactive particle that breaks down over time. As it breaks down it releases energy, and this energy is absorbed by the synovium and helps to stop it bleeding.

Your affected joint will have an ultrasound scan as part of the procedure. This helps to ensure that the needle is positioned correctly. Immediately after the procedure, you will have a scan to check the radioactive material is safely inside the joint and has not leaked.

How is the procedure performed?

The procedure involves injecting a safe radioactive liquid material into the affected joint space. **This material is custom made and sourced for you so it is essential that you can commit to attending**.

The injection is carried out as a day case procedure in the Radiology department using ultrasound guidance. A Consultant Radiologist and a Consultant in Nuclear Medicine complete the procedure.

On the day

Arrive at Katharine Dormandy Haemophilia Centre (KDHC) prior to procedure (pre-determined time) for:

1. Clotting factor infusion 1 hour prior to procedure
2. Pain relief prescription
3. Complete pre procedure questionnaires

Review with specialist physiotherapist for advice on post-operative care. You will, be fitted with the appropriate walking aid, sling, or splint to wear following your procedure.

You will then be seen in the Nuclear Medicine department for a review followed by the radiology department where the procedure is performed.

After your procedure

You will have a home treatment plan of clotting factor for 48 hours following the procedure pre-determined by your parent Haemophilia Centre.

- The treated joint should be immobilised for 48 hours
- You should not drive during this time
- Normally one week off work or sports is required prior to returning to normal activity
- Pain killers are advised to maintain comfort over the first week (please discuss with your clinicians)

Is it effective?
Clinical research and feedback from many patients having the procedure has been positive. They show a reduction in bleeding without additional factor concentrate and improvements in pain and joint function, even in joints with haemophilic arthritis.

Risks and side-effects
There may be some discomfort initially during the injection, but pain should not persist for long after this. Taking regular pain killers will help during the first few days. It is important to report any discomfort beyond this (including skin irritation at the needle site) to your haemophilia team.

How to find us
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Ground Floor
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Pond Street
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Other contacts
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More information
For more information about the Nuclear Medicine or Haemophilia services at the Royal Free London, please visit our website: www.royalfree.nhs.uk

Your feedback
If you have any feedback on this leaflet or for a list of references for it, please email: rf.communications@nhs.net

Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

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