'In the groin'

Femoral Injecting

THIRD EDITION

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Thanks to all those who read drafts and offered comments
and suggestions for improvements.

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We will update this booklet in the future. If you have any suggestions for changes or improvements, please write to Andrew Preston, Exchange Supplies, 1 Great Western Industrial Centre, Dorchester, Dorset DT1 1RD or email andrew@exchangesupplies.org

You can get more copies of 'In the groin' from Exchange Supplies, tel: 01305 262244

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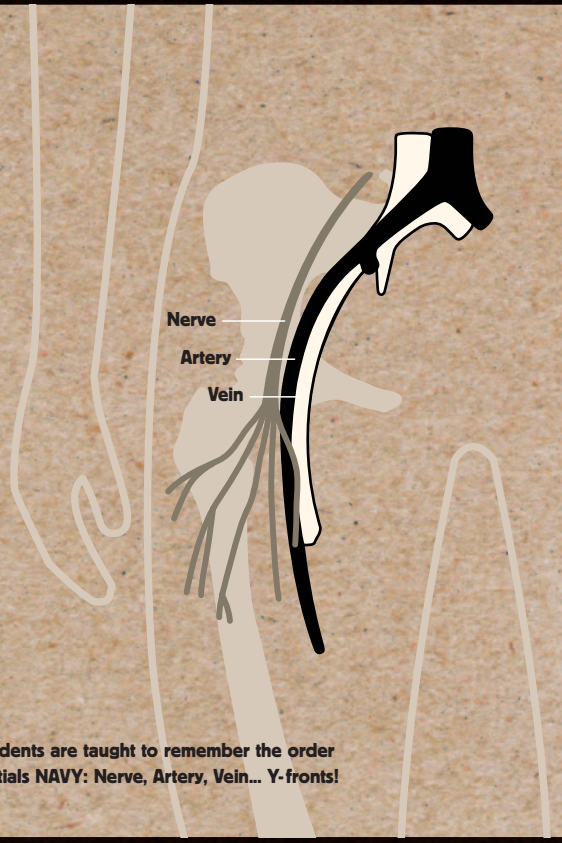
tools for harm reduction

Read this first!

If you don't already inject into your groin, you only need to read this far because our advice is simple – don't do it! It is dangerous and can cause serious health problems.

We have written this booklet to tell people who are already injecting into their groin about the risks and possible problems, and to give advice on alternatives, reducing risk, avoiding problems and getting help when you need it.

Disclaimer
This booklet should not give the impression that injecting into the groin can be made safe. We cannot accept responsibility for injuries or illness you suffer as a result of following the advice we give.



Tip

Medical students are taught to remember the order with the initials NAVY: Nerve, Artery, Vein... Y-fronts!

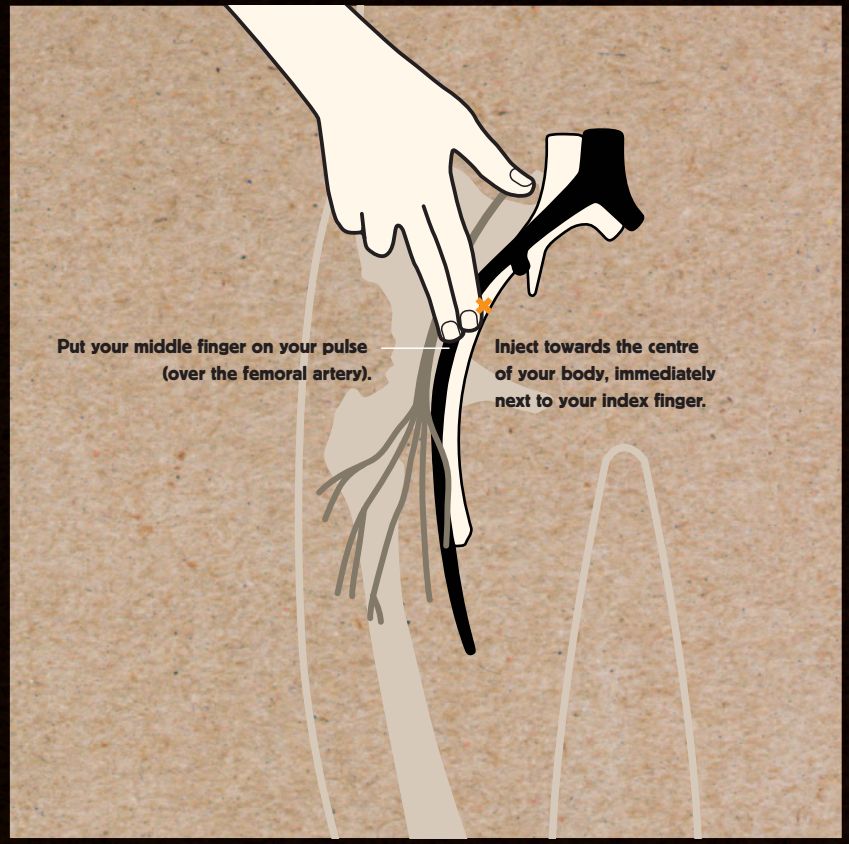
The femoral vein

is a large, deep vein carrying blood from your legs back to your heart.

It is very close to:

- the femoral **artery** – which carries blood under high pressure to your legs and feet; **and**
- the femoral **nerve** – which is important in giving you 'feeling' in the top of your leg and controlling your knee joint.

Looking for the vein can easily lead to accidentally hitting the artery or nerve.



Missing the femoral artery and nerve

You can use your **middle and index fingers** (the two fingers on the front cover!) to reduce the risk of hitting the femoral artery or nerve.

You do this by:

- finding the pulse in your groin and putting your middle finger there and keeping it there;
- putting your index finger tightly alongside your middle finger; and
- choosing an injecting site towards the centre of your body, immediately next to your index finger.

Following these instructions will not guarantee that you hit the femoral vein, but will make it less likely that you accidentally hit the artery or nerve.

Problems

This section tells you about the problems that can be caused by injecting in the femoral vein and gives advice about what can be done if they happen to you.

Hitting the femoral artery

Bleeding from an artery can cause death.

If you hit the femoral artery, you will usually get severe pain, and if the needle goes through the lining of the artery, the plunger of the syringe may be pushed back by the rush of bright-red frothy blood.

If you hit the artery, do not inject!

Blood in the artery is heading down to the leg, and **injecting into it can cause the blood supply to block and could result in gangrene in the leg or foot.**

If you hit an artery, you should get medical help. Because the artery is so deep, there can be a lot of bleeding without any obvious blood on the surface.

If you hit the artery, lie down and apply firm pressure for at least half an hour. If you are bleeding heavily, get a faster pulse, go pale or feel faint, dial 999 and ask for an ambulance.

Hitting the femoral nerve

The femoral nerve controls the muscles that help the knee to bend. It also supplies feeling to the front of the thigh and part of the lower leg.

Hitting the femoral nerve usually causes terrible pain in the whole leg. The instinct is to do the right thing – withdraw the needle.

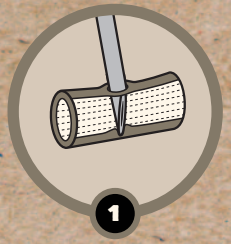
If the nerve gets damaged, it can cause weakness, problems with leg movement and loss of feeling in the leg.

Poor circulation

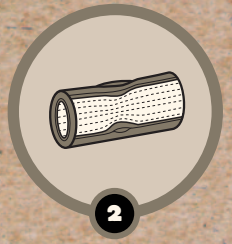
These pictures show how repeated injecting can cause veins to collapse. This usually takes longer in the groin than it does with veins in the arms because the femoral vein is bigger. **BUT it is much more serious!**

The femoral vein is the main route out of the leg. Blocking it means the blood cannot flow through the leg quickly enough to keep it healthy and warm. This means people with collapsing femoral veins often have swollen legs and cold, blue toes.

Blocking the femoral vein can make the leg swollen and painful, and carrying on injecting can lead to tissue death and amputation.



The lining of the vein can get damaged by the needle, the drug (especially pills), injecting too often or too fast, infection and 'flushing.'



Damage to the lining of the vein causes clots to form on the inside of the vein.

The disruption of blood flow causes more clots to form, making the vein even narrower.

Eventually the vein blocks, and the clots turn into scar tissue which shrinks and pulls the sides of the vein together, collapsing the vein.

Blood clots

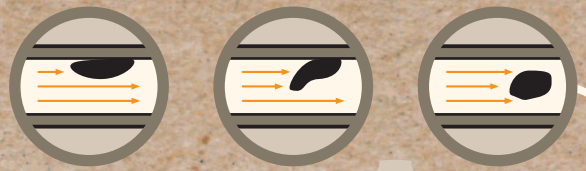
Injecting into the groin can cause dangerous blood clots to form in the deep veins in the leg.

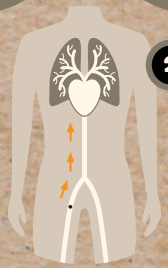
Deep vein thrombosis (DVT) is the medical term for the condition where a blood clot completely or partly blocks a deep vein.

DVTs can form at or near the injection site, or lower down in the leg, usually around the calf muscle.

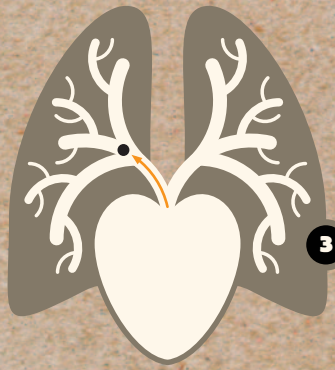
The symptoms of DVT include redness, pain and swelling in your calf muscle, and swelling of the lower leg. If you inject into your groin and you get these symptoms, you should call an ambulance or go to a hospital emergency department.

1 A clot in a deep vein can grow quickly, and may not be strongly attached. If the flow of blood gets between the clot and the wall of the vein, it can force the clot off.





2 The clot travels up through the veins to the lungs and heart.



3 The smaller the clot, the further into the lung it gets and the less damage it does. **But big clots can block the blood supply to the lungs and kill.**

Don't ignore symptoms of even a small clot (chest pain and breathlessness). **It may be a warning of a big clot on its way.**

Ulcers

The reduced flow of blood makes it difficult for the skin to repair itself. This can make the skin shiny and sore – even small cuts and knocks can develop into painful open sores called ulcers.

Ulcers can take years to heal. Specialist treatment and dressings can help them to heal more quickly – some drug services have a specialist nurse who can do dressings, but in most areas you have to be referred to the district nursing service by your GP.

Gangrene

All tissue needs a blood supply to survive. If the femoral vein gets too narrow for enough blood to flow through it, the skin can start to die, leading to gangrene. This usually starts in the toes. Anyone with serious circulation problems should check their toes regularly. Dead black tissue starts to rot and smell. If you have problems like this, get urgent medical advice.

Reducing the risk

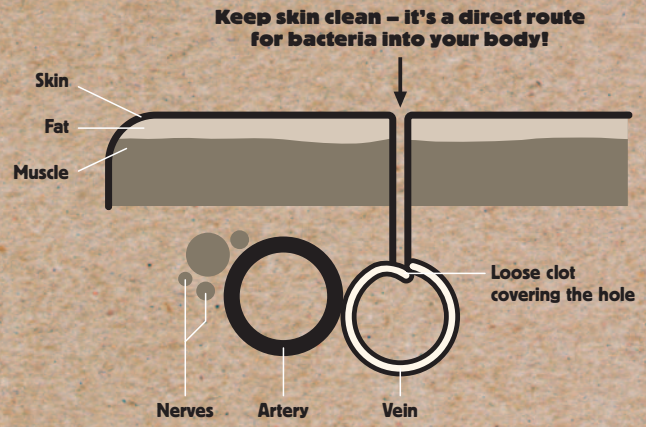
Keeping the injecting site healthy

Once people have found their femoral vein, most inject into the same place over and over again. Injecting into the same place means that the hole down to the vein becomes lined with skin cells, much like a body piercing (see the picture opposite). This means that there is a direct route for bacteria from the surface of your skin to your bloodstream.

To reduce the risk of infection, wash your hands before preparing your hit and use a new sterile needle every time. **It is important to regularly wash the site with soap and hot water, especially before injecting.**

If your injecting site becomes swollen, hot or red, starts weeping or becomes smelly, you should stop using it and see your doctor.
You will probably need antibiotics to clear up the infection. Not doing anything can lead to blood poisoning. Blood poisoning can kill.

WARNING: Position of the vein may vary
Injecting can cause the vein, nerve and artery to move



Needles

Make sure you get enough works from the needle exchange to use new sterile equipment every time.

The choice of needle size is important. Thin/small people can often (with care) use the small orange needle on an insulin-type syringe. For most people the least dangerous needles to use for femoral injecting are the separate long orange needles.

Although orange needles are thinner and less likely to cause damage to the vein, they can easily break off and get lodged inside the body, where they can cause serious injury.

Rotating injecting sites

The usual safer injecting advice is 'rotate your injecting sites to give your veins a chance to recover.' However, things are not so simple with high-risk sites like the groin.

If you already inject on both sides of the groin, it probably makes sense to continue to use both of them and to avoid using a site that is infected or sore.

But if you only use one side, the risks of hitting the artery or nerve mean that trying to find the vein on the other side may create more risks than benefits.

If you are injecting into your femoral vein and you still have veins left in your arm, you should switch to injecting there – it is more visible, but much less risky.

Blood clots – what to do

If you have had symptoms of DVT and you get chest pain or become breathless, dial 999 for an ambulance. The blood clot may have broken away from the vein, travelled back up through the body and got stuck in your lungs. This is a potentially life-threatening condition known as pulmonary embolus (PE).

The treatment for DVT starts with injections to dissolve the clot, followed by warfarin tablets to stop another clot forming.

If you have had DVT, it is really important to keep taking the warfarin tablets, and to turn up for appointments with the doctor to have the warfarin levels in your blood checked.

Alternatives to injecting

If you are injecting into your femoral vein, it would make more sense to inject in your arms (if you still can) and consider these alternatives to injecting.

A script If you are injecting heroin, you may be able to get a prescription for methadone or one of the other drugs prescribed to help opiate dependence. Ask your needle exchange, drug service or GP about the treatment options available or ring the National Drugs Helpline on 0800 776600.

Chasing Smoking drugs may not be as economical as injecting them, but is much, much safer. Think about chasing, even if it is only occasionally to give your poor veins a rest!

The 'bottom line' Some people who are running out of veins have switched to the anal route. It's not glamorous, but it can work – your bowel is designed to absorb fluids efficiently, and can absorb drugs almost as fast as injecting. There is a risk of overdose so don't use any more than you normally would. Insert a syringe (without a needle!) a short distance, squirt and hold on until it's absorbed.

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