

Accidental Arterial Puncture Guidance for Patients



This leaflet explains what has happened and what you should do after leaving the department if a small artery was accidentally punctured during insertion of your cannula.

Your radiographer will explain this to you before you leave. If you have any questions, please speak to a member of staff.

What has happened?

When placing a cannula (small plastic tube) into a vein in your arm or hand, it is sometimes possible to accidentally enter a nearby artery instead of a vein.

Arteries carry blood under higher pressure than veins. If this happens, the cannula is removed immediately, and firm pressure is applied to the area.

Accidental arterial puncture is an uncommon but recognised complication of cannulation, and is usually recognised straight away.

What treatment has been given?

If this has happened to you, the following steps will have been taken:

- The cannula was removed immediately.
- Firm pressure was applied for several minutes.
- A dressing has been placed over the site.

You will have been observed to ensure bleeding has stopped before leaving the department. In most cases, no further treatment is required.

What can I expect?

After an unintended arterial puncture with a cannula used for intravenous cannulation, it is normal to experience:

- Mild tenderness at the site.
- Bruising
- Slight swelling

These symptoms should improve over the next few days.

A small lump (haematoma) may develop. This is a collection of blood under the skin and usually settles naturally.

What should I do at home?

To support healing, we recommend the following:

- Keep the dressing on for at least 2-4 hours (or as advised).
- Avoid heavy lifting or strenuous use of the affected arm for 24 hours.
- If bruising or swelling develops, you can apply a cold compress for 15-20 minutes at a time.
- Simple pain relief such as paracetamol can be taken as required.

Avoid vigorous rubbing or massage of the area.

When should I seek medical advice?

Please seek urgent medical advice (GP, NHS 111, or attend Urgent Care/A&E) if you experience:

- Increasing pain or swelling.
- Persistent bleeding that does not stop with firm pressure.
- Numbness, tingling or weakness in the hand or arm.
- Increasing tightness in the arm.
- The hand becomes pale, cold or discoloured.

These symptoms are uncommon but require assessment.

How to contact us

If you have any further questions about your scan or aftercare or would like to raise a concern, please contact the department you visited between the hours of 9am to 5pm, Monday to Friday.

Queen Square Imaging Centre

Tel: 020 7833 2513

Email: imaging@queensquare.com

Chenies Mews Imaging Centre

Tel: 020 3887 0566

Email: referrals@cheniesmews.com

Outside of these hours, please contact your GP or NHS 111 for advice.

To be completed by the Radiographer:

Date and Time of arterial puncture:	
Site of puncture:	
Duration of pressure applied:	
Dressing applied?	Yes [] No []
Doctor reviewed (Name): _____	Observed for _____ minutes prior to discharge
Radiographer name and signature	

This leaflet reflects current national guidance on contrast administration and clinical guidance on vascular access and complication management, including standards published by the Royal College of Radiologists and Resuscitation Council UK (latest editions at time of review).