BC Renal Agency

Troubleshooting Guide

IN THIS SECTION

Trouble placing your needles

Problem: Pain and swelling or a lump at needle site when placing needles.

Cause: Needle infiltration. This means the needle has accidentally poked through the wall of your fistula or graft. We call this a blown needle. Blood leaking into the area around your fistula or graft causes the swelling and pressure which is painful. **You cannot use this needle site for dialysis.**

Solution:

- Take out the needle and apply gauze pad to stop the bleeding.
- Place a small ice pack over the swollen area to help reduce any swelling and bruising.
- Wait for the bleeding to stop.
- **If you have a "spare" buttonhole site, use this instead and rest the "blown" site until the swelling and bruising are gone.**
- If you do not have a "spare" buttonhole you may be able to place a new needle just above or to the side of your buttonhole tunnel.
- Patients with a graft and those patients who do not use the buttonhole technique will need to find a new site away from the blown site.

If you do not feel able to place another needle, you can delay your treatment until the next day. However, you should first consider the following:

- Is it safe to miss this run?
- When did you last dialyze?

If you are not sure what to do, call your nurse for advice.

Needle problems while on hemodialysis

Problem: Pain and swelling or a lump near the needle site during the run.

Cause: Your needle tip has accidentally poked through the wall of your fistula or graft when you moved your arm. Blood is now leaking into the area around your fistula or graft.

Solution: Return your blood using the good needle. (See below.)

Returning your blood when the arterial outflow needle has "blown"

- Stop blood pump.
- Close the clamp on the arterial outflow needle and arterial bloodline.
- Do not try to return blood using the arterial needle. (It is OK to waste this blood.)
- Open saline infusion line (roller clamp and green clamp must be open).
- Set blood pump speed to 150mL/min.
- Turn on the blood pump and return blood through the venous return needle as if you were ending treatment.
- Take out the blown needle and apply gauze pad to stop the bleeding.
- Place a small ice pack over the swollen area to help reduce any swelling or bruising.
- Wait for the bleeding to stop.
- Take out second needle as usual.
- Plan to rest your fistula or graft for one day.

Once you have safely returned your blood, you can lower the time remaining in your **Time** box to *zero*, and then press **Rinseback**. This lets your machine know that the treatment has ended.

Returning your blood when the venous return needle has "blown" (If possible, ask a family member for help.)

- Stop the blood pump.
- Close the clamp on both your bloodlines and both needles.
- Disconnect your saline infusion line from the blood circuit. The green clamp must be closed. Keep the ends sterile (no touching).
- Disconnect your venous bloodline from your blown venous needle.
- Disconnect your arterial bloodline from your arterial needle.
- Attach the end of your venous bloodline to your good arterial needle.
- Attach your arterial bloodline to the saline infusion line using the Gambro Recirculation Connector (blue label package).
- Open the roller clamp on the saline infusion line.
- Open the clamps on the arterial and venous bloodlines and at the arterial needle.
- Set the blood pump speed to 150mL/min.
- Turn on the blood pump and return your blood through the arterial needle.
- Take out the blown needle and apply a gauze pad to stop the bleeding.
- Place a small ice pack over the swollen area to help reduce any swelling or bruising.
- Wait for the bleeding to stop.
- Take out the second needle as usual.
- Plan to rest your fistula or graft for one day.

Once you have safely returned your blood, you can lower the time remaining in your **Time** box to *zero*, and then press **Rinseback**. This lets your machine know that the treatment has ended.

Note: Let your nurse know If you are unable to return your blood. Losing a circuit of blood will lower your hemoglobin for a few weeks and may cause you to feel weaker or more tired than usual.

Clotted access needle

Problem: No flow or poor flow from your access needle.

Cause: If you have trouble placing/taping your needle it is possible that blood may have clotted in the needle.

Solution:

- Try to clear the blood clot from the needle by pulling back on the syringe plunger.
- **Never push blood into your body that might be clotted.**
- Clamp off your needle and add a new 10cc syringe.
- Look for blood clots in your first syringe by squirting the blood onto a gauze pad.
- If you are able to get rid off the clot, flush your needle in and out and then add 10cc of saline to the needle to keep it clear.
- If you are not able to fix the needle, remove as above and place a new "wet" needle with 10cc saline already primed through the needle line.

Bleeding around the needle entry point

Problem: Fresh blood is oozing from your needle entry site and will not stop.

Cause:

- Using the same needle site over and over in a graft can weaken the graft wall or can tear too large a hole in the graft fabric causing blood to leak out.
- Using sharp needles in a well formed fistula buttonhole site can tear too large a hole in the vessel wall causing blood to leak out.

Solution:

- Lower the blood pump speed to 200mL/min.
- Place a 2x2 gauze pad under the leaking needle.
- Place a 2x2 gauze pad over the leaking needle and press very lightly for five minutes.
- If the blood loss does not stop or slow down, you will have to end your treatment and rinseback in the usual way or circle your blood. (See *Circulating* on Page 7.)

Unusual bleeding at the end of a run

Problem: It is taking too long for the needle sites to stop bleeding (more than 15 minutes).

Cause:

- You may be using too much heparin.
- You may be taking off your dressings too soon or too roughly which can dislodge your scab and cause bleeding to start again.
- You may have a narrowing (stenosis) in your fistula or graft which causes increased pressure inside your access.

Solution:

- Try using less heparin. Call your nurse to lower your running dose.
- Leave your dressings on for four hours or overnight before carefully removing them.
- Always track your venous and arterial pressure readings at 200mL/min at the beginning of your run. Have the pressure readings changed much? Is the vascular pressure (VP) much higher? Call your nurse to discuss. You may need a fistulogram.

Clotted fistula or graft

Problem: You are unable to feel a thrill or a buzz over your graft or fistula and you cannot hear a strong bruit.

Cause:

- Wearing tight-fitting clothing, jewelry or carrying handbags or grocery bags over your graft or fistula arm might reduce the blood flow in your access and cause a clot.
- Taking bloodwork or blood pressure readings on your fistula or graft.
- Coming off dialysis too dry with a low blood pressure or taking off too much fluid too quickly.

Solution:

- Call your nurse or kidney doctor right away.
- You will be asked to go to the emergency room. It can be possible to fix a clotted graft if it is seen to within 24 hrs.

Poor flow from a catheter

Problem: Poor blood flow from the catheter at hook up or during treatment

Cause:

- A blood clot may have formed into a flap over the tip of the catheter
- The catheter might have moved slightly.

Solution:

- Try coughing deeply. This causes increased pressure in your chest cavity and might help to shift the blood clot at the tip of the catheter.
- Try changing your position. Move from side to side. Lower your head.
- If you have a good flow from only one port, use this as your arterial outflow. You may be able to return through the other port. This may mean you have to run with your lines in reverse position.
- Call your nurse or kidney doctor. You may need to instill a medication called Cathflo into your catheter. Cathflo helps to dissolve blood clots.

Clotted catheter

Problem: You cannot remove the heparin from one or both limbs of your catheter.

Cause: Your catheter might be clotted or it might have moved slightly.

Solution:

- Try coughing deeply. This causes increased pressure in your chest cavity and might help to dislodge a blood clot at the tip of the catheter.
- Try changing your position. Move from side to side. Lower your head.
- Call your nurse or kidney doctor. You may need to instill a medication called Cathflo into your catheter. Cathflo helps to dissolve blood clots.

Circulating your blood while on hemodialysis

If you have needle problems, with someone to help you may be able to put your blood into a circle.

Always have 2x10cc syringes of saline and a sterile circle ready on the top of your machine in case you need to put your bloodlines into a circle.

Your blood can safely circle for up to **30 minutes** while you take out a blown, clotted or leaking needle and replace it with a new needle.

You can then reconnect to your bloodlines and finish your treatment.

For more information, see *Circulating* in section 8, page 9 of the *AK95S Training Guide*.

Fever and chills while on hemodialysis

A very small rise in your body temperature above normal is usually a sign of infection. Normal body temperature is about 36.5 degrees Celsius or 98 – 99 degrees Fahrenheit.

In many cases your dialysis access will be the site of the infection. Infection can also be caused by contaminated water or dialysate or by improper technique when setting up your machine.

If you have a fever or suspect your dialysis access might be infected, call your dialysis nurse or doctor before starting dialysis.

If you do have an infection, you may experience some or all of the following symptoms:

- A chill after you start dialysis, which may cause you to start shaking uncontrollably (rigours)
- A higher than normal temperature (fever)
- An unusually low blood pressure than is normal for you
- Headache
- Aching muscles
- Nausea and vomiting

If you experience some or all of these symptoms, take the following actions:

- Come off dialysis as you may start to feel too unwell to manage your dialysis safely.

- Check your dialysis access for signs of infection, e.g. redness, heat, pain, swelling or drainage.
- Take your temperature.
- Check for other signs of infection, e.g. coughing up thick coloured sputum or pain when passing urine.
- Call your training nurse or physician for advice.
- Be prepared to go immediately to your local hospital emergency room if your dialysis team provides this advice. If you feel very unwell and cannot contact your dialysis team, go to your nearest hospital emergency room.

Remember to take all your medications with you when you go to the emergency room.

- At hospital you will probably be put onto IV antibiotics.

Chest pain

Signs and symptoms may include: pain or tightness in chest, back, arms, or jaw; difficulty breathing; shortness of breath; anxiety; weakness; severe indigestion.

What to do if you are not on dialysis:

- **Call 911**
- **Bring your medications or medication list with you to the hospital emergency department**

What to do if you are on dialysis:

- Remain calm, but act immediately
- **Call 911**
- Return blood – if no air in blood
- Push start/stop UF button
- Lower head
- Take blood pressure – if your B/P is low, give 200cc extra saline. Repeat three times as needed

- If you have been prescribed nitroglycerin, take one pill/spray every 5 minutes for up to 3 doses as prescribed
- Discontinue dialysis
- Take your blood pressure again
- **Bring your medications or medication list with you to the hospital emergency department**

Possible causes of chest pain:

- Fluid overload (hypervolemia)
- Going below your goal weight (hypovolemia)
- Low hemoglobin (anemia)
- Not enough oxygen to heart (hypoxemia)
- Heart disease (CAD)
- Hemolysis
- Dialyzer reactions
- Air in your bloodstream