

Dialysis Professional

“Ready, Set, Go” The Steps to Catheter Freedom Week 4: Fistula Maturity Check



- Perform fistula maturity check at each treatment or when patient reports a change.
 - Reinforce to patient the importance of daily fistula checks.
 - Listen to the patient.

Look



Listen



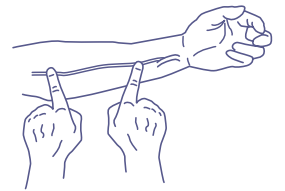
Feel



Arm Elevation test
(AVF Only)



Augmentation
Test



Perform once.
If normal, no need to
repeat.

Were there any abnormal findings during the fistula maturity check?

No

Document that there were
no abnormal findings.

Yes

Document findings and
refer to expert clinician.

Continued...

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Look

The hand **looks the same** as it did before surgery.

The surgery site is **clean and dry**. The skin over the fistula is **all one color** and looks like the skin around it.



The arm is **bruised** and/or the hand is **not the normal color**.

There is **redness, swelling, or drainage**.

Listen



Bruit: Listen with a stethoscope over the anastomosis. This is where the artery is joined to the vein.

The bruit is **audible**.
You hear the bruit along the cannulation segment.

The bruit sounds like a “whoosh” or, for some, like the beat of a drum.

There is **no sound**, or the bruit is **not as loud** as the last time it was checked.

Sound is **different** from what a normal bruit should sound like.

Feel

You can **feel the fistula** and **identify the cannulation segment**.
The cannulation segment is long enough to use two needles placed two inches apart.



Thrill: A vibration or buzz that can be felt most prominently over the anastomosis; it will diminish along the length of the fistula.

The thrill becomes stronger as the fistula matures.

Pulse: A slight beating that feels like a heartbeat. Fingers placed lightly on the fistula move slightly.

You **cannot** feel the fistula.
You **cannot** feel the cannulation segment.

Thrill: You **cannot** feel the thrill, or it is **weaker** than the last time it was checked.

Pulsatile: A Pulsatile beat is one that is **stronger than a normal pulse**. Fingers placed lightly on the fistula **rise and fall with each beat**.

Continued...

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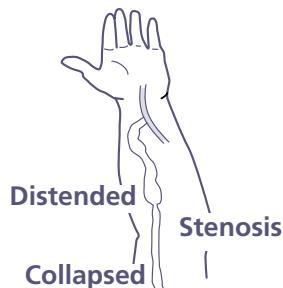
Arm Elevation

Lower Arm Fistula

The fistula outflow vein **collapses** when the arm is raised above the level of the heart.

Upper Arm Fistula

The fistula outflow vein **partially collapses** when the arm is raised above the level of the heart. It may **feel “flabby”** when palpated.



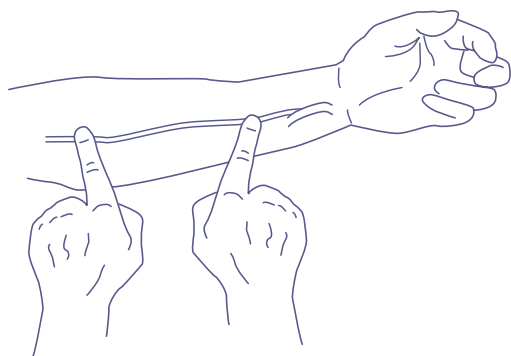
Lower Arm Fistula

The fistula outflow vein **does not collapse** after the arm is raised above the level of the heart. This may mean there is a problem allowing the blood to flow from the fistula.

Upper Arm Fistula

The fistula outflow vein **does not collapse partially or become “flabby”** after being raised above the level of the heart. This may mean there is a problem allowing the blood to flow from the fistula.

Augmentation Test



Occlude Access

Place your fingers on the out-going vein, feel the pulse, and press down until no blood is flowing through the access.

Palpate Pulse

Keep your finger on the vein and feel for the pulse near the arterial connection of the fistula.

Pulse is **“strong and bounding”** and may cause your finger to **rise and fall** with each beat.

Pulse **does not** become more forceful or **“strong and bounding.”**



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