

Comments
Dialysis Shunt Maintenance
CV-027

1. Comment

Title terminology is significantly outdated. Better title is; Maintenance of Hemodialysis Access. See: J Vasc Surg 2008; 48:2S-25S.

Response

Since this is a long standing document, providers are so accustomed to its original name, changing it now would be too confusing.

2. Comment

The words “dialysis” and “hemodialysis” are used interchangeably throughout this document. This is incorrect. In the context of this subject the correct word is “hemodialysis”.

Response

While we made an attempt at this, all the descriptions of CPT codes and CMS transmittals refer to the word dialysis only so we will be keeping this wording.

3. Comment

Terminology used throughout entire manuscript is outdated. The correct terminology is autogenous fistulas and prosthetic grafts. See: J Vasc Surg 2002; 35:603-10.

Response

We have noted this but many of the terms in the policy come from the CPT descriptors or CMS.

4. Comment

In the “Definitions” section the terminology is incorrect. In 2002 a multidisciplinary collaborative committee established nomenclature. (J Vasc Surg 2002; 35:603-10.)

In colloquial usage the word “thrombolysis” applies only to dissolution of thrombus using pharmacologic methods. Mechanical methods to remove thrombus, of which there are several, are termed, “mechanical thrombectomy.”

Response

The terminology has been changed.

5. Comment

The word “clot” is inappropriate; the correct word is “thrombus” and it should be used throughout the entire document.

Response

This was changed where possible. If it was in CMS language we could not change.

6. Comment

The word “shunt” is antiquated and no longer used in the hemodialysis access literature.

Response

It is still used so we will leave it in the document.

7. Comment

In the “Definitions” section add; “Dysfunctional hemodialysis access: a patent autogenous fistula or prosthetic graft with impaired function that limits the ability to complete the prescribed hemodialysis treatment. Evidence of impair function includes; suboptimal rate of intra access blood flow, elevated intraaccess venous pressures, inability to cannulate the access, prolonged bleeding after removal of the hemodialysis needles, venous hypertension ipsilateral to the hemodialysis access.”

Response

This has been added.

8. Comment

In the “Definitions” section add; “Thrombosed vascular access: an autogenous fistula or prosthetic graft that is no longer patent and cannot be used as vascular access for hemodialysis treatment.”

Response

This was added to the definition section.

9. Comment

In the “Definitions” section add; “Non-maturing fistula: an autogenous fistula that is > 6weeks old and cannot be cannulated for hemodialysis treatment. At six weeks a fistula should satisfy the “Rule of 6’s” which are: a) vein is >6mm diameter, b) vein is located <6mm below skin surface, c) rate of blood flow >600ml/min, and 4) vein length for cannulation is >6cm in length.”

Response

This was added to the definition section

10. Comment

In “Interventions” section; the word “declotting” is a colloquial term and should not be used in this document. The correct term is percutaneous thrombolysis or thrombectomy.

Response

The word declotting is used in CPT definitions so we cannot exclude this term.

11. Comment

In “Interventions” section; sentence should be changed to “Percutaneous thrombectomy methods include pharmacological or mechanical methods to dissolve, fragment, and/or aspirate obstructive thrombus from the fistula, graft, or peripheral native vein (e.g. 35476).

Response

The language in this section has not been changed.

12. Comment

In “Interventions” section. Suggestion for improvement of 2nd paragraph; “Angioplasty is often necessary for treatment of venous stenosis that cause obstruction or occlusion of blood flow through an autogenous fistula, prosthetic graft, or native outflow veins (e.g. 35476).

Angioplasty is occasionally needed for treatment of central venous stenosis involving the subclavian vein, brachiocephalic vein, or superior vena cava (e.g. 35476). These need not all be performed on every dysfunctional or thrombosed hemodialysis access. Each may, under unique circumstances, be considered reasonable and medically necessary.”

Response

We have added this section.

13. Comment

In “Interventions” section. Suggestion for improvement of 2nd paragraph; “Arteriography is occasionally needed to evaluate the inflow arteries that provide blood flow to a hemodialysis fistula or graft (e.g. 75710, 75790). Arterial angioplasty may be needed for treatment of arterial stenosis (e.g. 35475). These need not all be performed on every dysfunctional or thrombosed hemodialysis access. Each may, under unique circumstances, be considered reasonable and medically necessary.”

Response

This has been added.

14. Comment

In “Interventions” section. Suggestion for improvement of 2nd paragraph; “Surgical procedures may be necessary if percutaneous treatment is unavailable or unable to adequately repair the cause of dysfunction or thrombosis of a hemodialysis fistula or graft. Surgical revision is often necessary for repair of venous or arterial stenoses or occlusions (e.g. 36832, 36834).

Intraoperative angiography may be needed to assess the vascular access circuit (i.e. inflow arteries and/or outflow veins).”

Response

We have decided to let this section stand.

15. Comment

Change to; “Clinical Evidence of Hemodialysis Access Dysfunction”.

“Physical examination of an autogenous fistula or prosthetic graft can provide clinical evidence of vascular access function. Qualitative assessment of vascular access performance during hemodialysis treatment can also provide evidence of access dysfunction. If present, the following clinical abnormalities are appropriate indications for referring the patient for additional evaluation.

1. Venous outflow obstruction:
 - a. Low rate of intraaccess blood flow
 1. Prosthetic graft <600ml/min
 2. Autogenous fistula <500ml/min
 - b. Elevated intraaccess venous pressure
 1. Mean static venous pressure (VP) ratio >0.5
 - c. Prolonged bleeding following needle removal
 - d. Suboptimal hemodialysis kinetics
 - e. Signs of venous hypertension in ipsilateral extremity
 - f. Abnormal physical findings, specifically pulsatile graft or loss of thrill
 - g. Non-maturation (> 6 weeks) of an autogenous fistula

Response

Some of these changes have been added.

16. Comment:

Great policy. My only comment has to do with the section Limitations #2 – Thrombolysis. It may be helpful to provide some additional details on the limitations of reporting these codes with CPT code 36870.

It is generally agreed that in order to report the CPT codes for Thrombolysis (37201 and 75896) an infusion longer than one hour needs to be performed. This is exceedingly uncommon in the treatment of dialysis grafts and fistulae and these CPT codes for thrombolysis should rarely be reported in addition to the code for AV graft thrombectomy (36870). This service is typically included in the services for CPT code 36870.

It is indeed unusual to perform additional thrombolysis beyond the service described in 36870. However, now that we declot more AV fistulas compared to grafts (due to policies encouraging AVF over graft creation), however, I suspect that the incidence of embolization into the native artery distal to the anastomosis requiring true native arterial thrombolysis or embolectomy is more common. It is probably more appropriate to emphasize that this clinical circumstance be well documented, rather than depend upon the duration of infusion of thrombolytics in justifying the two codes together.

Response

This section has been modified to consider that declotting of more AV fistulas compared to grafts is occurring.

17. Comment

75790 has been deleted, this is supposed to be 75791.

36145 also has been deleted replaced by 36147 and 36148.

Response

These were corrected in the body of the policy.

18. Comment

Change the following section

1. Venous outflow impediment:
 - a. Elevated venous pressure in the graft **or fistula by monitor or physical exam (hyperpulsatile access)**
 - b. Elevated venous/arterial ratio (static venous pressure ratio - above 40%)
 - c. Prolonged bleeding following needle removal
 - d. Inefficient dialysis
 - e. Recirculation percentage greater than 10-15%
 - f. Development or enlargement of **aneurysms (fistula) or pseudoaneurysms (grafts)**
 - g. Swelling of the extremity
 - h. Large collateral venous channels
 - i. Loss of "machine-like" bruit, i.e., short sharp bruit
 - j. Abnormal physical findings, specifically pulsatile graft or loss of thrill
 - k. **decline or diminished intra-access blood flow by ultrasound or other direct determination**
2. Arterial inflow impediment:
 - a. Low pressure in graft even when outflow is manually occluded
 - b. Ischemic changes of the extremity (steal syndrome)
 - c. Diminished intra-access flow
3. **Lesion documented by imaging study s/a ultrasound or angiography**

Comment

There is one clinical situation that is an exception to the above. **Arterial PTA** may be necessary if there is an inflow arterial stenosis that is limiting flow through the dialysis access. If a PTA is performed at the arterial anastomosis of an AV dialysis access, it could be coded as 35475/75962. In this instance, all PTA done within the AV dialysis access "vessel" would still be coded as a single PTA but would be coded with the arterial codes (35475/75962) instead of the venous codes (35476/75978), and the venous codes would not be used for any other angioplasty performed within the AV dialysis access vessel." Arterial PTA codes are not submitted for simple removal of the arterial plug when performing a declot procedure. **Angioplasty may be coded a second time if a separate stenosis is treated in a central vessel as mentioned above.**

