

CVAA Online Learning Resource 2015 – Module 1


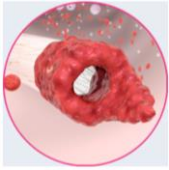
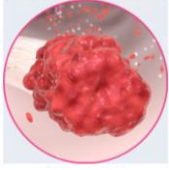

Literature Search Game

The objective of this activity is to aid healthcare practitioners in learning the key points within the Occlusion Management Guideline (OMG) document. The OMG for CVADs is available at www.cvaa.info, and can be found under the **Publications** tab.

Page 11: Match the type of occlusion with the signs and symptoms

Partial	Inability to aspirate blood but ability to infuse without any resistance. Lack of free-flowing blood return
Withdrawal	Decreased ability to infuse fluids into the CVAD; resistance with flushing and aspiration. Sluggish flow through the catheter
Complete	Inability to infuse or withdraw blood or fluid into the CVAD

Page 11: Fill in the blanks

Type of Thrombotic Occlusion:	Definition:
Intraluminal 	<p>An intraluminal thrombus often causes _____ obstruction.</p> <ul style="list-style-type: none"> • Forms within the _____ of the catheter. • Develops from _____ buildup within the lumen of the catheter as the result of _____, _____ through the lumen of the catheter, or _____ of _____ via the catheter. • May also be due to _____ caused by _____, change in _____ pressure, and _____ disconnection with negative displacement devices.
Fibrin Tail 	<p>A _____ occurs when fibrin adheres to the end of the catheter. As the tail attaches to the catheter and sticks out or _____ into the _____, more _____ and other _____ become deposited onto the tail.</p> <ul style="list-style-type: none"> • Acts as a _____ that permits infusion but not withdrawal of fluid from the catheter. • Gets '_____ ' over the opening when _____ is attempted. The fibrin tail gets pushed aside by the _____ of injecting or infusing through the device.
Fibrin Sheath 	<p>A _____ forms when fibrin adheres to the _____ surface of the catheter, creating a '_____' over the end of the catheter or its _____. Fibrin sheaths can cover a catheter within _____ or sooner after placement.</p> <ul style="list-style-type: none"> • Occasionally the _____ or _____ covers the end-hole of the catheter and causes _____. Fluid can be _____, but _____ cannot be _____. • Serious _____ / _____ complications can result when medications are _____ from entering the _____ by the fibrin sheath. As a result, _____ will infuse up the fibrin sheath and back to the _____ site.
Mural Thrombus 	<p>A _____ forms when fibrin from a vessel wall _____ binds to fibrin covering the _____. Vessel wall injury may be due to the _____ in the vessel with motion, a _____ insertion, poor blood _____, _____ vasculature, or a high _____ ratio.</p> <ul style="list-style-type: none"> • May _____ the tip of the _____ and cause _____ venous _____ or progress into a venous _____ that leads to _____ occlusion of the _____.

Literature Search Game

Page 12: Background: CVAD Occlusion

CVAD occlusions can be categorized as _____, _____ or _____.

Catheter _____ is the _____ approach to the management of _____ occlusion. Restoring _____ to the CVAD is less _____, is more _____, and ensures limited _____ of _____, reduced trauma and psychological stress to the _____, reduced risk of _____, and _____.

The cost of device replacement can be an estimated \$____ to \$____ and far _____ the cost of _____ as well as the _____ of _____, _____ time, and clinic time.

Page 13: Signs and Symptoms of CVAD Occlusions

Upon Infusion or Flushing:

1. _____ when _____
2. _____ flow
3. _____ to _____
4. Frequent _____ alarm on _____
5. _____ or _____ or swelling or leaking at the _____

Upon Aspiration of Blood

1. _____ to _____
2. _____ return

Page 20: Sample dosing includes the following

- 1-____ mg reconstituted _____ in ____ ml mini-bag of ____ over ____ minutes
- ____-4mg _____ alteplase in 100ml mini-bag of NS over ____ minutes
- ____ mg reconstituted alteplase in _____ ml mini-bag of NS over ____ minutes

Page 25: Prevention of CVAD Occlusion

- _____ CVAD lumens with _____ prior to and after _____ sampling, _____ of _____/_____, and changing _____.
- Use the _____ or _____ technique.
- Flush enough NS to _____ or _____ from the cap or _____ and CVAD _____.
- Flush with a minimum _____ of _____ the internal volume of the catheter system; however a _____ volume may be needed after _____ or _____ transfusion procedures.
- _____ the cap/_____ connector if there is _____ blood or _____.
- _____ between _____.