What is a Broviac®/Hickman® central venous line?
A Broviac®/Hickman® central venous line (CVL) is a special intravenous (IV) line inserted under the skin on the chest wall and into a large vein that leads to the heart. It’s used in children and teens who need IV therapy for a long time.

CVLs are helpful for:
- chemotherapy and other medications
- TPN (total parenteral nutrition)
- transfusions (blood and blood products)
- some blood tests

What does the CVL look like?
Inside the body there is a long, thin, flexible tube inside a large vein, just above the heart. Outside the body, you’ll see:
- a thin, flexible tube (catheter) coming out of a small skin opening on your child’s chest (exit site). This catheter may have two or more ‘branches’ or lumens. These lumens are clamped, capped and always covered with a dressing.
- a small dressing or bandage over the exit site.

How will a CVL help my child or youth?
CVLs make treatments easier for your child. Because the catheter is in a large vein, chemo treatments won’t irritate or damage the vein, like they could in smaller, arm veins. Your child will also be able to have both hands free during treatments. CVLs often mean fewer needles for your child.

How is it inserted?
The CVL will be inserted in the operating room, and it will take about an hour and a half. Your child:
- will have an anesthetic (medicine to keep him in a deep sleep during the surgery)
- will go to the recovery room after surgery
- will have small bandages or tapes over the CVL exit site and the neck
- may be able to go home with you the same day

How do we get ready for the surgery?
Explain the surgery to your child, in a way that she will understand (‘The doctor is going to place a special tube in a blood vessel in your chest, to make it easier to give you your medicine. You’ll have medicine to put you in a deep sleep during the operation, and you’ll wake up when it’s over’). Tell your child that he’ll be able to see the catheter, tubing and dressing, but that this is OK.

You will get a call about your appointment time and any instructions before the surgery.
How long will the CVL stay in?
The CVL can stay in place for months or even years. Your child will have it in place for 3 to 6 months after the last treatment.

What will happen when the CVL is used for treatments?
When your child needs a treatment, the nurse will:
• hook up IV tubing to the CVL catheter (one or two lumens may be used)
• give the treatment (for example, chemotherapy or blood)
• flush the lines with heparin (heparin prevents the CVL from getting blocked)
• keep the catheter lines clamped when not in use

A specially trained nurse will change the exit site dressing and catheter caps every six or seven days or when needed.

What about activities?
Your child or youth can go back to many everyday activities. Please tell us about the activities and sports your child takes part in. We can help decide if some activities should be on hold while the CVL is in place. To protect the CVL exit site, catheter and tubing:
• Avoid rough play and sports (to prevent hits to the CVL area).
• Keep the catheter and tubing taped to your child’s chest.
• Do not allow your child to go swimming. The CVL and exit site should not get wet, so your child cannot go swimming. Talk with the clinic nurse about how to keep the CVL dressing dry when your child showers or takes a bath.

Coping with a CVL
Children and youth can have mixed feelings about having a CVL. It can make their treatment easier, but they might feel funny at first having a tube coming out of their chest. Our staff will help your child cope with feelings by:
• listening
• reminding them that all their feelings are OK
• helping them to express their feelings in words or through play
• sharing ways to think and to relax to feel better about things

Contact information
Hematology/Oncology/Medical Day Unit (MDU)
Weekdays from 8:00 a.m. to 4:30 p.m.
613-737-2470

Hematologist/ oncologist on-call
Urgent after hours needs
613-737-7600
Press “0” for the operator. Ask the operator to page the Hematologist/Oncologist on-call. Please don’t hang up. It can sometimes take 5-10 minutes for the hematologist/oncologist on-call to reach the operator.

What to watch for:
Check your child’s CVL exit site every day.
Contact the hematology/oncology/MDU if you notice:
• fever or chills
• bleeding, redness or swelling at the exit site, neck or arm
• leaking or drainage at the exit site or anywhere on the catheter
• the CVL has been pulled out of place (for example—if the catheter looks longer than usual)
• pain when the CVL is being used