ASCENSION ST VINCENTS
VASCULAR CATHETER PATIENT HANDOUT

Radiologist who performed your procedure: _____

Vascular Catheter Placement Procedure Description:

- Image-guided placement of central venous catheters (including Quinton catheters, Permacaths, triple lumen catheters, TICC lines and PICC lines) is performed to provide reliable access to a large vein for medications, IV fluids, blood draws, dialysis, nutrition, or other treatments.
- During the procedure, a radiologist or trained provider uses ultrasound and X-ray imaging to precisely place the catheter. The skin is cleaned with antiseptic, and local anesthetic is used to numb the area. A small incision is made, and the catheter is inserted into a vein (commonly in the neck, chest, or arm). Imaging is used to confirm correct positioning of the catheter tip. For tunneled catheters (such as Permacaths and TICC lines), part of the catheter is tunneled under the skin before entering the vein to help reduce infection risk and keep the catheter securely in place. The catheter is secured to the skin and covered with a sterile dressing.
- The procedure usually takes about 30 minutes. You will then be observed for period of time to monitor for any complications.

Vascular Catheter Removal Procedure Description:

- Vascular catheter removal is performed when a catheter is no longer needed for treatment or there is a complication such as infection.
- During the procedure, a radiologist or trained provider cleans the skin around the catheter with antiseptic. Local anesthetic may be used to numb the area. The catheter is then removed, and a dressing is applied over the site.
- The procedure usually takes about 10 minutes. You will then be observed for period of time to monitor for

Benefits:

- Imaging allows the radiologist to precisely place or remove the catheter.
- Provides reliable venous access for medications, IV fluids, blood draws, dialysis, nutrition, or other treatments.
- Reduces the need for repeated needle sticks.
- Placement and removal are minimally invasive procedures performed through small skin openings.
- Image guidance helps reduce the risk of complications.
- Allows safe removal of the catheter once it is no longer needed.
- Most patients tolerate the procedures well and return to normal activities shortly afterward.

Risks & Potential Complications:

- The following list includes some, but not all, possible complications.

- Pain is common but usually mild, typically resolves within a few days, and can be managed with over-the-counter pain medication. Severe pain can occur but is uncommon.
- Minor bleeding is common and usually does not require medical treatment. Any resulting bruising typically resolves on its own over several days. Serious bleeding that requires medical treatment can occur but is uncommon.
- Infection can occur but is uncommon. Most infections are mild and can be treated with antibiotics.
- Injury to nearby organs, blood vessels, or nerves can occur but is uncommon.
- Blood clot formation (thrombosis) in the vein around the catheter can occur.
- The catheter can become clogged, displaced, or malfunction and may require adjustment or replacement.
- Air can leak from the lung into the surrounding space, causing lung collapse (pneumothorax) but is uncommon. Many mild cases are managed with observation and chest radiographs, while some require temporary placement of a small tube to remove the air and may require hospitalization.
- Feeling faint or lightheaded (a vasovagal reaction) can occur during or after the procedure. This is usually mild and resolves quickly.
- Allergic reactions to the local anesthetic, topical antiseptic or other medications are uncommon.
- Death can occur but is rare.

Alternatives:

- PICC lines, midline catheters, or other central venous catheters placed by non-radiology services.
- Peripheral IV lines for short-term medications or fluids.
- For dialysis patients, surgical creation/placement of a fistula/graft in the arm or leg or placement of a peritoneal dialysis catheter in the abdomen.
- Some patients choose no further access or removal; however, this may limit treatment options or increase the risk of infection and is generally not recommended.

Aftercare:

- One of more bandages will be applied over the procedure sites. You may remove the bandages 24 hours after your procedure. Skin glue may also be applied. Do not pick off the glue—allow it to flake off on its own over several days.
- You may shower and allow water to flow over the site 24 hours after your procedure; however, do not submerge the site in water (bath, pool, hot tub, or ocean) until it has healed.
- If you were provided with an ice pack, apply it to the procedure site periodically for 15-30 minutes after your procedure.
- Do not apply lotion or ointment to the site until it has healed unless instructed to do so.
- Avoid strenuous physical activity for at least 24 hours after your procedure. Then gradually increase your activity level as tolerated.
- It is normal to experience mild pain and bruising after your procedure. You may take acetaminophen (Tylenol), aspirin, ibuprofen (Motrin), or naproxen (Aleve) for relief. It is safe to take aspirin, ibuprofen, or naproxen soon after your procedure; however, you may experience increased bruising if you do so.
- Contact Radiology, your ordering provider, or your nurse if you have any concerns or experience any of the following: severe pain not responding to medications; significant pain or swelling at the procedure site; signs of possible infection (significant redness or purulent drainage from the procedure site, severe pain, or high fever); shortness of breath and/or chest pain worse than normal for you; dizziness or lightheadedness when standing; or a faster-than-normal heart rate. Call 911 in the event of an emergency.

- Weekdays 8 am to 5 pm call 308-8401 (Riverside), 296-3886 (Southside), 602-1360 (Clay) or 691-1297 (St Johns). Weekdays 5 pm to 10 pm or weekends 6 am to 10 pm call 308-8401. If outside of these hours, call the hospital operator at 308-7300 and ask to speak to the Interventional Radiologist on call.