Hickman Repair and Replacement Policy and Procedures
Chest Medicine Associates

Background

Hickman catheters (HC) placed in the SVC position are necessary for safe, outpatient, continuous infusion IV prostanoid medication infusion (epoprostenol and treprostinil) for management of Pulmonary Arterial Hypertension (PAH). A single lumen Hickman is the preferred catheter (Hickman™ single lumen catheter with peel-apart introducer (Stock 0600560); 9.6F, 3.1 mm internal diameter; 90 cm, volume 1.8 ml). A Groshong central venous catheter may also be used if available. Double lumen catheters should be avoided as they are associated with an increased risk of central line associated blood stream infections (CLABSI). "Power Hickman" catheters should be avoided due to risk of kinking (hard material). Traditional PICC lines in general should not be used in the outpatient PAH setting due to infection and safety concerns.

Hickman Catheter Placement, Repair and Replacement

HC will need to be placed to initiate prostanoid medications. This will generally be done in the inpatient setting by Vascular Surgery. HC will sometimes need to be repaired or replaced.

Repairs may be performed in the MMC ED by Vascular Surgery for punctures, leaks or fractures. The MMC Central Supply Department has the BARD Hickman CV Catheter Repair Kit (X) (stock 0601630) is available.

Process for Repair

1. Request patient come to MMC ED (or coordinate transfer from outside facility)
2. Notify MMC "OneCall" system: Call to Vascular Surgery On-call (AMION) to meet patient in ED and facilitate repair
3. Notify PH team (Attending, PA, MA)
4. Call PCCM Consultation Service Fellow/Attending to coordinate care and be available as needed (e.g. hospitalization required).

Replacements are occasionally required for infection (catheter track or rarely CLABSI) or related to the HC migrating out of the skin, leading to cuff (anchor) exposure and are usually non-emergency. If a catheter is completely dislodged, the patient should be instructed to go to the nearest hospital emergency room for emergency replacement. A peripheral IV may be used for prostanoid infusion for up to 4-5 hours only due to risk of chemical thrombophlebitis (high pH of diluent).

Process for Replacement

1. Notify PH team (Attending, PA, MA)
2. PH team member will call Vascular Surgery On-call (AMION) to coordinate OR time for HC repair
3. Call MMC OneCall to coordinate MMC direct admission, admission via ED, or coordinate transfer from outside facility
4. Call PCCM Consultation Service Fellow/Attending to coordinate care as needed (e.g. hospital admission and discharge process)