Table 2. Summary of common peripheral and central venous catheters used in interventional radiology

1 Peripheral Catheter

Line	Location	Catheter Tip Location	Use	Additional Considerations
Peripheral IV catheter	Variable, typically upper extremity vein, usually in the hand or antecubital fossa	Variable, within a peripheral vein	- Short-term intravenous access to administer medications - Fluids and blood draws	
PICC	Basilic > brachial > cephalic > medial cubital vein preferred	Cavoatrial junction	- Long-term intravenous access, including antibiotic administration, chemotherapy, and total parenteral nutrition	Single or double lumen depending on the indication

2 Non-tunneled CVC

VasCath (Cook Medical; Bloomington, Indiana)	Internal jugular vein, external jugular vein, subclavian vein, or femoral vein	Lower superior vena cava, cavoatrial junction, right atrium, upper inferior vena cava	- Continuous or intermittent drug infusions - Central venous blood pressure monitoring - Acute hyperalimentation - Blood sampling - Simultaneous separate infusion of drugs for multi-lumen catheters only	Single or double lumen depending on the indication

3 Tunneled CVC

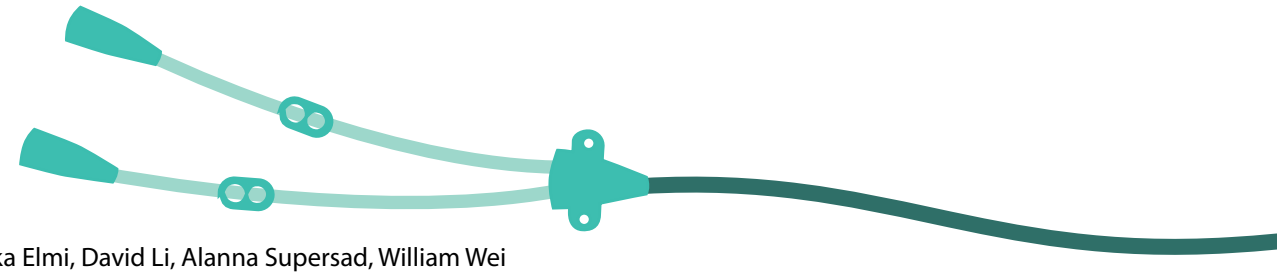
Hickman (Becton Dickinson; Mississauga, Ontario)	Tunneled under the skin of the right chest wall and typically placed into the internal jugular vein or alternatively the subclavian vein	Cavoatrial junction	- Chemotherapy - Blood transfusions - Antibiotics - Intravenous fluids - Total parenteral nutrition - Blood sampling	- Often used for chemotherapy - Single or double lumen
Groshong (Becton Dickinson; Mississauga, Ontario)	Tunneled under the skin of the right chest wall and typically placed into the internal jugular vein or alternatively the subclavian vein	Cavoatrial junction	- Chemotherapy - Blood transfusions - Antibiotics - Intravenous fluids - Total parenteral nutrition - Blood sampling	Three way valve at the catheter tip

3 Tunneled CVC cont'd

Line	Location	Catheter Tip Location	Use	Additional Considerations
Palindrome (Mozarc Medical; Minneapolis, Minnesota)	Tunneled under the skin of the right chest wall and typically placed into the internal jugular vein or alternatively the subclavian vein	Cavoatrial junction	Bridge while arteriovenous fistula matures or for long term hemodialysis	
Powerline (Becton Dickinson; Mississauga, Ontario)	Tunneled under the skin of the right chest wall and typically placed into the internal jugular vein or alternatively the subclavian vein	Cavoatrial junction	Similar to other CVCs but allows for power injection of contrast	Power injectable with max flow rate of 5 ml/sec
Broviac (Becton Dickinson; Mississauga, Ontario)	Tunneled under the skin of the right chest wall and typically placed into the internal jugular vein or alternatively the subclavian vein	Cavoatrial junction	- Chemotherapy - Blood transfusions - Antibiotics - Intravenous fluids - Total parenteral nutrition - Blood sampling	- Initially developed for children - Smaller internal diameter as compared to Hickman

4 Implantable CVC

Port-A-Cath (ICU Medical; San Clemente, California)	Implanted in the chest wall with access to either the internal jugular vein or the subclavian vein	Cavoatrial junction	- Repeated venous access for delivery of medications, fluids, and total parenteral nutrition - Venous sampling	Standard or low profile
Port-A-Cath Power (ICU Medical; San Clemente, California)	Implanted in the chest wall with access to either the internal jugular vein or the subclavian vein	Cavoatrial junction	Similar to Port-A-Cath but allows power injection of contrast	Allows infusion up to 5 ml/sec or 300 PSI



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