



*Book Supplement*

**Differential Diagnosis of Intravascular Catheter Infections**

Disease	Notes
Catheter colonization	Absence of signs or symptoms of infection with a positive catheter culture. No evidence that treatment is required.
Phlebitis	Tenderness, warmth, erythema, or induration 3-6 cm away from the catheter site. May be noninfectious and respond to warm packs and nonsteroidal agents.
Exit-site infection	Positive culture of exudate from catheter site with or without bloodstream infection or erythema, induration or tenderness within 2 cm of the catheter site. Requires antibiotic therapy.
Tunnel infection	Erythema, induration, or tenderness >2 cm from the catheter site along the subcutaneous tunnel of a central venous catheter. Requires antibiotics and device removal.
Pocket infection	Subcutaneous pocket of a totally implanted port with infected fluid that may or may not have ruptured, drained, or caused local skin breakdown. Requires antibiotics and device removal.
Infusate-related bloodstream infection	Growth of the same organism on cultures of the blood and infusate with no other source of infection. Requires antibiotic and may indicate contamination during manufacturing.
Catheter-related bloodstream infection	Growth of the same organism from cultures of the blood and the catheter hub, tip, or subcutaneous segment. Requires antibiotic therapy.
Complicated catheter infection	Associated endocarditis, septic thrombophlebitis, or metastatic infection. Requires prolonged therapy (4-6 weeks).

Table from *Physicians' Information and Education Resources (PIER)*, *Catheter-Related Intravascular Infections* module.