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ANTIMICROBIAL DOSING RECOMMENDATIONS FOR ADULT PATIENT RECEIVING PERITONEAL DIALYSIS

Antibiotic	Intraperitoneal dose (preferred route for peritonitis)	IV dose (for systemic infections)	Oral dose
Amoxicillin-clavulanate			500 mg/125 mg PO TID OR 875 mg/125 mg PO BID
Ampicillin		2000 mg IV q12h	
Ampicillin-sulbactam		3000 mg IV q12h	
Cefazolin[a]	2000 mg IP q48h	1000 mg IV daily	
Cefepime[a]	2000 mg IP q48h	1000 mg IV daily	
Ceftazidime[a]	2000 mg IP q48h	1000 mg IV daily	
Ciprofloxacin		400 mg IV q12h	750 mg PO daily
Daptomycin	300 mg IP daily (NOT for systemic infection)[b]	6 mg/kg IV q48h OR 10 mg/kg IV q48h (*Enterococcus* only)	
Ertapenem		500 mg IV daily	
Fluconazole		200 mg IV q48h	200 mg PO q48h
Gentamicin	0.6 mg/kg IP daily (NOT for systemic infection)[b]		
Levofloxacin			250 mg PO daily
Meropenem[a,]	1000 mg IP daily	1000 mg IV daily	
Tobramycin	0.6 mg/kg IP daily (NOT for systemic infection)[b]		
Vancomycin[a,c]	15 – 20 mg/kg IP q72 – 96h	15 – 20 mg/kg IV q72 – 96h	

[a] Has excellent bioavailability when given intraperitoneally and therefore may be used intraperitoneally to treat systemic infections. ID and nephrology consultation recommended

[b] Dose indicated is for treatment of peritonitis ***only***

[c]Vancomycin has highly variable kinetics. Doses should be adjusted to maintain a pre-dwell trough of 15 – 20 mcg/mL

Use typical end-stage renal disease/dialysis dosing for all other medications not specifically listed

Bioavailability of the listed beta lactam antibiotics and vancomycin, as measured by 24-hour area under the curve, approaches 100% when administered intraperitoneally.[1,2,3,4,5,6] Therefore, the intraperitoneal route is a viable route of administration for the treatment of systemic infections and may be preferred in situations where placement of a central venous catheter is undesirable and the oral route is not possible. These uses must be discussed with nephrology to identify whether dialysis prescription changes are warranted.

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