

Table 26-2. Antihypertensive drugs in dialysis patients: dosages and removal during dialysis

Drug	Tablet Size (mg)	Initial Dose in Dialysis Patients (mg)	Maintenance Dose in Dialysis Patients (mg/d)	Removal During HD	% Renal Drug Excretion	% of Normal Dose to Prescribe in ESRD
Calcium antagonists						
Amlodipine	5	5 qd	5 qd	No	<10%	100%
Diltiazem, extended release	120, 180, 240, 300, 360	120 qd	120-300 qd	No	<4%	100%
Felodipine	5, 10	5 qd	5-10 qd	No	<0.5%	100%
Isradipine	5	5 qd	5-10 qd	No	0%	100%
Nifedipine XL	30, 60	30 qd	30-60 qd	No	<1%	100%
Verapamil	40, 80, 120	40 bid	40-120 bid	No	3-4%	100%
ACE inhibitors						
Captopril	25, 50	12.5 qd	25-50 qd	Yes ^a	80%	8-16%
Enalapril	2.5, 5, 10, 20	2.5 qd or qod	2.5-10 qd or qod	Yes ^a	100% (enalaprilat)	33-50%
Fosinopril	10, 20	10 qd	10-20 qd	Yes ^a	75%	50-100%
Lisinopril	5, 10, 20, 40	2.5 qd or qod	2.5-10 qd or qod	Yes ^a	100%	25-50%
Perindopril	4	2 qod	2 qod	Yes ^a	60-70%	10%/ avoid
Ramipril	1.25, 2.5, 5, 10	2.5-5 qd	2.5-10 qd	Yes ^a		33-66%
β-Blockers						
Acebutolol	200, 400	200 qd	200-300	Yes ^a	15-30%	33-50%
Atenolol	50, 100	25 qod	25-50	Yes ^a	75-85%	25-50%
Carvedilol	5	5 qd	5	Yes ^a	<2%	100%
Metoprolol	50, 100	50 bid	50-100 bid	Yes ^a	5-10%	100%
Nadolol	20, 40, 80, 120, 160	40 qod	40-120 qod	Yes ^a	60-75%	25%
Pindolol	5, 10	5 bid	5-30 bid	Yes ^a	36-39%	100%
Propranolol	10, 40, 80	40 bid	40-80 bid	Yes ^a	negligible	100%
Adrenergic modulators						
Clonidine	0.1, 0.2, 0.3	0.1 bid	0.1-0.3 bid	No	40-70%	50-75%
Clonidine (TTS) patch	0.2	weekly	weekly	No	40-70%	100%
Guanabenz	4, 8	4 bid	4-8 bid	No	<1%	100%
Guanfacine	1, 2	1 qod	1-2 qd	No	24-73%	100%
Labetalol	100, 200, 300	200 bid	200-400 bid	No	<5%	100%
Prazosin	1, 2, 5	1 bid	1-10 bid	No	<10%	100%
Terazosin	1, 2, 5	1 bid	1-10 bid	No	10-15%	100%
Vasodilators						
Hydralazine	10, 25, 50, 100	25 bid	50 bid	No	<10%	100%
Minoxidil	2.5, 10	2.5 bid	5-30 bid	Yes ^a	12-20%	50%
Angiotensin II antagonists						
Losartan	50	50 qd	50 qd	No	<13%	100%
Candesartan	4, 8, 16, 32	16 qd	4-32 qd	No	50%	50%

^aScheduling should be set up so that drugs that are removed by hemodialysis are administered after dialysis. No drug in the table undergoes substantial removal during CAPD.
HD, hemodialysis; CAPD, continuous ambulatory peritoneal dialysis; TTS, transdermal therapeutic system.