



Table of the Most Commonly Used Psychotropic Medications for Patients With ESRD

Psychotropic Kidney impairment	Considerations	Potential Side-effects	Effect of Dialysis	Pharmacokinetics in Medications
<b>SSRI'S</b> (selective serotonin reuptake Inhibitors) Prozac (Fluoxetine) Celexa (Citalopram) Paxil (Paroxetine) Zoloft (Sertraline)	Medication takes 6-8 weeks to obtain full effect.	Suicidal ideation bleeding, weight gain, gastrointestinal symptoms.	Fluoxetine and Sertraline not removed by dialysis. Citalopram and Paroxetine: not studied.	Citalopram in severe impairment (creatinine clearance <20mL/min): use with caution. Paroxetine (creatinine clearance <30mL/min): mean plasma concentrations are about 4 times that seen in normal function.
<b>SNRI'S</b> (serotonin Norepinephrine reuptake inhibitors. Effexor (Venlafaxine)	Serum half-life increases from 4 hours to 6 to 11 hours in patients with ESRD.	Toxic metabolites accumulation, sexual dysfunction, hypertension.	Not removed by dialysis.	Total daily dose decreased by 50% given after completion of dialysis.
<b>Serotonin Modulators:</b> Serzone (Nefazodone) Desyrel (Trazodone)	Accumulation of active metabolites. Avoid Use in cardiac patients.	Accumulation of toxic metabolites, liver failure (Nefazodone). Central nervous systems, hypotension and cardiac arrhythmias.	Nefazodone: Minimal removal Trazadone: No effect.	Nefazodone: non-renal elimination of drug. Seru half-life in ESRD: 3 to 5.8 hours. Trazadone: no data available.
<b>DNRI-</b> Dopamine Norepinephrine reuptake inhibitors Wellbutrin, Zyban (Bupropion)	Increased risk of seizures due to toxicity of drug level and accumulation of active metabolites	Hallucinations, insomnia, agitation.	Not known	Use with caution and consider a reduction in dosing frequency.
<b>Partial Serotonin 5HT(1A) receptor Agonists.</b> Buspar (Buspirone)	Serum half-life in patients with ESRD. 1 to 5 hours.	Dizziness, nausea, headache, insomnia, tremor, and seizure on withdrawal.	Not removed by dialysis.	Dose reduction is advised. Usually by 25% to 50% to prevent hypotension.
<b>Tricyclics and Tetracyclics:</b> Elavil (Amitriptyline) Norpramin (Desipramine) Sinequan (Doxepin), Pamelor, (Nortriptyline)	Possible cardiac side effects. Avoid using if possible.	Central nervous system symptoms, anticholinergic effects QTc prolongation cardiac arrhythmia, orthostatic hypotension.	Amitriptyline: not removed by hemodialysis. Desipramine, Doxepin, Nortriptyline: not removed by hemodialysis or CAPD	
<b>Benzodiazepines:</b> Xanax (Alprazolam) Ativan (Lorazepam), Valium (Diazepam) Dormicum (Midazolam) Librium (Chlordiazepoxide).	Use with care due to high rate of side effects.	Delusions, hallucinations, prolonged sedation.	Alprazolam: minimal removal. Lorazepam, and Diazepam: not removed by hemodialysis. Midazolam: not known.	Alprazolam and Diazepam: increased free fraction of plasma protein bound drug in ESRD. Minimal differences in dialysis patients seen. Lorazepam manufacturer does not recommend used in ESRD.