CYCLIC ANTIDEPRESSANTS

Generic names: amitriptyline, clomipramine, desipramine, doxepin, imipramine, nortriptyline

**General Information:** This group of older drugs is used to treat depression, anxiety, insomnia, pain syndromes, and sometimes other conditions, alone or in combination with other drugs. While they are no longer first-choice drugs for treating depression because they tend to have more side effects than the more modern antidepressants, they are quite effective in some people. Their beneficial effects reflect activity at serotonin and/or norepinephrine receptors in the brain. They are not habit-forming.

**Guidelines for Use:** Tablets or capsules are generally available in 10, 25, 50, 75 and 100 mg. strengths, depending on the specific drug. Some tablets may be broken in half to get the correct dosage, but check with your clinician or pharmacist to be sure. All are available generically. These drugs are usually started at low doses (10-25 mg.) and increased gradually as you get used to their effects. A typical schedule would be to increase by 25 mg. every 5-7 days up to a total daily dose of 75-300 mg. given in one or two doses. These medications may be taken with food to reduce early nausea. Your clinician is likely to order blood levels of the medication after at least 5 days of steady dosing (no missed doses) at a target dosage. You should take your evening dose of the drug approximately 12 hours before going to the lab in the morning to have this blood level drawn; if you also take a morning dose, hold it until after the blood is drawn. You may eat a normal breakfast before going to the lab unless other tests are being done that require fasting. An electrocardiogram (EKG or ECG) is usually ordered early in treatment also.

Some people begin to notice improvement in symptoms in 1-2 weeks, but it may take 4-6 weeks before the maximum benefit is reached. Some symptoms, such as sleep, may improve before others do, and you may have good days and bad days for a few weeks -- this is normal when recovering from depression or anxiety. If you forget to take a dose but remember within 8 hours or so, go ahead and take it unless it is likely to make you too sleepy. If it is close to your next dose, skip the missed dose; do not take double doses. Store the drug in a dry, tightly-closed, light-resistant container out of reach of children.

**Side Effects of Cyclic Antidepressants:**

*Note: Most side effects taper off during treatment as you become used to the drug.*

Common side effects (notify your clinician if severe):

--- dry mouth*  
--- drowsiness  
--- disorientation, confusion  
--- tremor  
--- blurred vision#  
--- sweating  
--- heart palpitations  
--- constipation+  
--- dizziness**  
--- weight gain
*Dry mouth may be counteracted by frequent rinsing with water and by using sugar-free gums or candies. Avoid sugary drinks and candies as these may increase tooth decay.

#Blurred vision or dry eyes may be treated with artificial tears available over the counter in drugstores. If you wear contact lenses, you may need to rinse more frequently with a wetting solution.

+To treat constipation, increase consumption of high-fiber foods and fluids; use an over-the-counter stool softener such as Colace, available generically; use a bulking agent such as Citrucel, Metamucil, psyllium or bran, but avoid taking it at the same time as you take the medication as it can interfere with absorption of the drug.

**Dizziness or lightheadedness usually occur when you change position from sitting or lying to standing. When getting up, move very slowly, sit for a minute or so before attempting to stand, and hold on to something to maintain balance.

Less common side effects (notify your clinician if severe):

--urinary hesitancy 
--insomnia
--cardiac arrhythmia 
--upset stomach
--seizure 
--sexual changes
--skin rash: STOP THE DRUG AND CALL YOUR CLINICIAN

Any antidepressant, including the cyclic drugs, may cause activation into a state of mania or mild mania (“hypomania”) in vulnerable individuals, usually but not always those who have bipolar disorder. Such a state is characterized by increased energy and hyperactivity, decreased need for sleep, marked euphoria or irritability, impulsiveness and an increase in pleasure-seeking. CALL YOUR CLINICIAN AS SOON AS POSSIBLE IF YOU DEVELOP THESE SYMPTOMS.

Precautions: Do not take one of these drugs if you have ever had an allergic reaction to it. Inform your clinician if you have any known drug allergies; if you have epilepsy, kidney disease, liver disease, thyroid disease, heart problems, or glaucoma; if you are taking any other drug (prescription or non-prescription), vitamin, supplement or herb; if you will be undergoing anesthesia or surgery while taking the drug. Inform the clinician if you are or may be pregnant. Exposure to certain of these drugs in the uterus slightly increases risk of congenital heart defects. You and your clinician will need to weigh the benefits of treatment against the risks to mother and baby. Women should not breastfeed while taking these medications. Cyclic antidepressants are used for some conditions in children and adolescents, but should be closely monitored by a pediatric psychiatry specialist. Elderly people are especially prone to side effects with these drugs; lower doses and less frequent increases in dosage may be needed.

These drugs frequently cause drowsiness. If so, avoid driving or operating machinery until you are sure your alertness and coordination are not affected.
Cyclic antidepressants may cause discontinuation symptoms in some people if they are stopped abruptly, particularly after long-term use. Possible symptoms include anxiety, headache, nausea and vomiting, dizziness, fever, sweating, runny nose, and muscle aches -- a flu-like feeling. The drug should be tapered down gradually under the supervision of your clinician to avoid this.

**Overdoses of cyclic antidepressants may be fatal**, particularly if taken with other drugs or alcohol. IMMEDIATE EMERGENCY MEDICAL CARE AT A HOSPITAL SHOULD BE SOUGHT IN ALL CASES OF OVERDOSE. Symptoms of overdose develop rapidly after ingestion and might include exaggerations of any of the side effects listed above. Severe dizziness, confusion, agitation, dilated pupils, hallucinations, vomiting, stupor and loss of consciousness, convulsions, and coma are more advanced signs of overdose. **CALL 911 IF THESE SIGNS EMERGE IN A PERSON TAKING ANY CYCLIC ANTIDEPRESSANT.**

**Interactions:**

**Alcohol:** The use of alcohol while taking cyclic drugs is not recommended, as the effects of alcohol may be increased and there could be additive sedation. Alcohol use may contribute to depression, so is not recommended for people experiencing depression.

**Food:** Avoid grapefruit juice, as it interferes with a liver enzyme needed to metabolize some of the cyclic drugs. There are no other food restrictions.

**Smoking:** Cigarette smoking may decrease the blood level of cyclic drugs.

**Other drugs:** Care should be taken when this drug is used in combination with any of the following drugs or drug classes: antiarrthymics; anticonvulsants (Tegretol, Dilantin, Depakote, barbiturates); other antidepressants (MAO inhibitors, SSRI’s such as Prozac and Zoloft); antifungals (ketoconazole, fluconazole); antihypertensives and calcium channel blockers (clonidine, diltiazem, verapamil); Tagamet; digoxin; narcotics (Methadone, morphine); COX-2 inhibitors (Celebrex and others); antipsychotics (Haldol, Prolixin, Mellaril); antihistamines (Benadryl and others); Prilosec; oral contraceptives; protease inhibitors (ritonavir); Tolbutamide; triptan drugs used to treat migraines (Imitrex, others); St John’s Wort. There are numerous possible drug interactions with cyclic antidepressants, many of which result in increased blood levels of the cyclic drug leading to worse side effects and possibly even toxic effects. **IT IS IMPERATIVE THAT YOU LET YOUR CLINICIAN KNOW ABOUT ALL OF THE OTHER DRUGS YOU ARE TAKING, INCLUDING OVER-THE-COUNTER DRUGS.**

**Long-term Use:** It is usually recommended that you remain on the therapeutic dose of an antidepressant for 6-12 months after depression has responded to treatment. As far as is known, cyclic antidepressants are safe for long-term use. Some people with severe or chronic depression or anxiety may stay on these medications for extended periods.