Amitryptaline

Indications

Note: Bracketed information in the Indications section refers to uses that are not included in U.S. product labeling.

Accepted

Depression, mental (treatment)¾Amitriptyline, amoxapine, [clomipramine] , desipramine, doxepin, imipramine, nortriptyline, protriptyline, and trimipramine are indicated for the relief of symptoms of major depressive episodes 1 ; bipolar disorder, depressed type 1 ; dysthymia 89 ; and atypical depressions. Some conditions associated with or accompanied by depression that are treated with tricyclic antidepressants include alcoholism, organic disease such as stroke or Parkinson's disease, and agitation or anxiety.

Enuresis (treatment adjunct)¾Imipramine hydrochloride 39 , but not pamoate, and [amitriptyline 118] are indicated as aids in the temporary treatment of nocturnal enuresis in children 6 years of age or older, after possible organic causes have been excluded by appropriate tests.

Obsessive-compulsive disorder (treatment)¾Clomipramine is used to relieve symptoms of obsessive-compulsive disorders, independent of concomitant depression 2, 42, 69, 112, 126.

[Panic disorder (treatment)] * 4, 13, 189¾Tricyclic antidepressants, especially clomipramine, desipramine, doxepin, 88 imipramine, and nortriptyline 150, 152, 159 are used in conjunction with psychotherapy and behavior therapy to block the recurrence of panic attacks, with or without phobias. Imipramine's antipanic effect does not appear to be correlated with presence of depressive symptoms. 42

[Pain, neurogenic (treatment)] *¾Tricyclic antidepressants, especially amitriptyline, clomipramine 150, 160 , desipramine, doxepin, imipramine, nortriptyline, and trimipramine 151 are used in patients with normal or depressed mood 40, 41 for the management of chronic, severe pain as in cancer; migraine and chronic, daily muscle-contraction headaches; rheumatic disorders; atypical facial pain; post-herpetic neuralgia; post-traumatic neuropathy 2 ; and diabetic or other 2 peripheral neuropathy.

[Attention deficit hyperactivity disorder (treatment)] * 188¾Desipramine, imipramine, and protriptyline 60 are used to relieve the symptoms of attention deficit hyperactivity disorder in some children over 6 years of age and in young adults 103.

Tricyclic antidepressants may be more useful than stimulants when the patient has become withdrawn and depressed 36.

[Headache (prophylaxis)] *¾Tricyclic antidepressants are used in the prophylaxis of vascular headache (including migraine) and mixed headache syndrome 142, 143, 144, 145, 146, 147, 148.

[Ulcer, peptic (treatment)] *¾Although amitriptyline, doxepin, and trimipramine are effective in the treatment of peptic ulcer disease and in relieving nocturnal ulcer pain 43, 56 , their use has been largely supplanted by histamine H 2-receptor antagonists, omeprazole, and sucralfate 176.

[Narcolepsy/cataplexy syndrome (treatment)] * or

[Narcolepsy/cataplexy syndrome (treatment adjunct)] *¾Tricyclic antidepressants, especially clomipramine, desipramine, imipramine, and protriptyline, are used to treat cataplexy associated with narcolepsy, with little or no effect on narcoleptic sleep attacks. Imipramine may be used in combination with amphetamines or methylphenidate when a patient requires treatment for both cataplexy and sleep attacks. 37 Patients with sleep disorders such as hypersomnia or impaired morning arousal may benefit by the use of protriptyline 84.

[Bulimia nervosa 88 (treatment)] * 189¾Amitriptyline, clomipramine 150 , desipramine, and imipramine have been shown to be effective in controlling the binge eating and subsequent purging of bulimia nervosa 44, 47.

[Cocaine withdrawal (treatment)] * 189¾Desipramine and imipramine are used to reduce craving and/or prevent depression upon withdrawal of cocaine 59, 80.

[Urinary incontinence (treatment)] *¾Imipramine is used for the treatment of stress and urge incontinence 172, 173, 174, 175, 176, 178, 179, 187.

Mechanism of action/Effect:

Antidepressant¾ Although the exact mechanism of action in the treatment of depression is unclear, tricyclic antidepressants have been thought to increase the synaptic concentration of norepinephrine (levarterenol; NE) and/or serotonin (5-hydroxytryptamine; 5-HT) in the central nervous system (CNS) 57.

One theory suggests that these neurotransmitters are increased through inhibition of their reuptake by the presynaptic neuronal membrane 57.

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Precautions to Consider

Cross-sensitivity and/or related problems

Patients sensitive to one tricyclic antidepressant may be sensitive to other tricyclic antidepressants 115, 116, 117, 120, 121, 122, 123 , and possibly to carbamazepine 161 , maprotiline, and trazodone, also.

Carcinogenicity/Mutagenicity

Amitriptyline¾In one study with rats, no evidence of increase in incidence of any tumor was found. However, amitriptyline has not been adequately studied in animals to permit an evaluation of its carcinogenic potential. 86 No evidence of mutagenicity was found in rats tested with the Ames salmonella test.

Amoxapine¾Pancreatic islet cell hyperplasia occurred in rats, with slightly increased incidence at doses 5 to 10 times the human dose  119.

Pregnancy/Reproduction

Pregnancy¾For amitriptyline¾  Adequate and well-controlled studies in pregnant women have not been done.

Animal studies have shown amitriptyline to cause teratogenic effects when used in doses many times the human dose.

FDA Pregnancy Category C  86.

For amoxapine¾  Adequate and well-controlled studies in pregnant women have not been done.

Animal studies have shown amoxapine to cause embryotoxic effects in doses approximating the human dose and fetotoxic effects such as intrauterine death, stillbirth, decreased birth weight, and decreased postnatal (0 to 4 days) survival  68 at doses many times the human dose.

FDA Pregnancy Category C  119.

For clomipramine  69 , desipramine  26 , and nortriptyline  24¾  Adequate and well-controlled studies in pregnant women have not been done.

Animal reproduction studies have been inconclusive.

FDA Pregnancy Category C  112.

For doxepin¾  Adequate and well-controlled studies in pregnant women have not been done.

Animal studies have shown no evidence of teratogenic effects at doses up to 25 mg per kg of body weight (mg/kg) per day for 8 to 9 months and no changes in litter size, number of live births, or lactation. However, a decreased rate of conception was observed when male rats were given 25 mg/kg per day for prolonged periods. 23

For imipramine¾  Adequate and well-controlled studies in pregnant women have not been done  39, 123.

However, there have been clinical reports of congenital malformations associated with the use of imipramine  39,  123.

Animal reproduction studies have been inconclusive  26,  127.