



Figure 22-1

TABLE 22-1 Neurotransmitters Involved in Behavior Disorders

• acetylcholine
• norepinephrine
• dopamine
• serotonin
• gamma-aminobutyric acid (GABA)

TABLE 22-2 Behavior Disorders and Some of Their Drug Therapies

Behavioral Disorder	Drugs Used for This Disorder
Urine spraying/markings	<ul style="list-style-type: none"> • benzodiazepines such as alprazolam, diazepam, and chlordiazepoxide • buspirone • TCAs such as clomipramine • SSRIs such as paroxetine and fluoxetine
Aggression	<ul style="list-style-type: none"> • TCAs such as amitriptyline • benzodiazepines such as diazepam • SSRIs such as fluoxetine • hormones such as medroxyprogesterone acetate and megestrol acetate
Obsessive-compulsive disorders	<ul style="list-style-type: none"> • TCAs such as amitriptyline • antihistamines (especially when due to pruritus) • benzodiazepines such as diazepam
Anxiety	<ul style="list-style-type: none"> • phenothiazines such as acepromazine • TCAs such as amitriptyline • buspirone • antihistamines (especially when due to pruritus) • benzodiazepines such as diazepam
Noise phobias	<ul style="list-style-type: none"> • benzodiazepines such as alprazolam • buspirone • TCAs such as clomipramine
Fear aggression clomipramine	<ul style="list-style-type: none"> • TCAs such as amitriptyline and clomipramine • buspirone • benzodiazepines such as diazepam

Table 22-2

TABLE 22-3 Behavior-Modifying Drugs

Drug Category Examples	Drug	Function						
Anti-anxiety (Valium®) agents lorazepam (Ativan®) alprazolam (Xanax®) chlordiazepoxide (Librium®) flumazenil (Mazicon®)	benzodiazepines	<ul style="list-style-type: none"> Promote the inhibitor neurotransmitter GABA in the brain Used to treat separation anxiety, phobias, aggression, and urine spraying 	<ul style="list-style-type: none"> diazepam 					
		antihistamines	<ul style="list-style-type: none"> Cause CNS depression, resulting in sedation 	<ul style="list-style-type: none"> 				
			phenothiazines	<ul style="list-style-type: none"> Work as dopamine antagonists 	<ul style="list-style-type: none"> 			
				azapirones	<ul style="list-style-type: none"> Serotonin blockers Used to treat urine spraying 	<ul style="list-style-type: none"> buspirone 		
		tricyclics			<ul style="list-style-type: none"> Prevent uptake of neurotransmitters Used to treat separation anxiety, obsessive licking, 	<ul style="list-style-type: none"> 		
					Antidepressants amitriptyline (Elavil®) clomipramine (Clomicalm®, Anafranil®) imipramine (Tofranil®)			

Table 22-3