Wyoming Drug Utilization Review

Depression Overview

Written by Megan Wagnon, PharmD 2022

Depression, also referred to as major depressive disorder, is a treatable medical illness (1). Some individuals can experience severe impairments that interfere with or limit their ability to carry out major life activities (2). Symptoms are experienced most of the day, nearly every day, for at least two weeks (2).

Based on Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) patients experience: dysphoria, anhedonia, significant appetite or weight change, insomnia or hypersomnia, psychomotor agitation or retardation (observable by others), anergia, thoughts of worthlessness or inappropriate guilt, impaired concentration or memory and recurrent thoughts of death or suicide, or suicide attempt (3).

Depression affects an estimated one in 15 adults (6.7%) in any given year (1,5). One in six people (16.6%) will experience depression at some time in their life (1,5). Women are more likely than men to experience depression (1,5). There are several factors that can play a role in depression such as biochemistry, genetics, personality and environmental factors (1,2,5). Depression is a treatable mental disorder with a majority experiencing at least some symptom relief. Between 80% and 90% percent of people with depression eventually respond well to treatment (1).

Before treatment is started, it is important for health care professionals to rule out other medical conditions such as thyroid problems, brain tumors, or vitamin deficiencies (1). Treatment can consist of medications, psychotherapy, or a combination of both (1,2). If these are not effective, then brain stimulation therapies can be explored (1,2).

Brain chemistry may contribute to an individual's depression; antidepressants are prescribed to help modify brain chemistry (1). Antidepressants work on various neurotransmitters: serotonin (5-HT), norepinephrine (NE) and dopamine (DA) (4,6). There are several classes of antidepressants (table below): Selective Serotonin Reuptake Inhibitors (SSRIs), Serotonin Norepinephrine Reuptake Inhibitors (SNRIs), Tricyclic Antidepressants (TCAs), Monoamine Oxidase Inhibitors (MAOIs), and Atypical Antidepressants (4,6).

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Antidepressant	Mechanism of Action	Contraindications (C) and Warnings (W)	Adverse Reactions
SSRIs Fluoxetine Citalopram Escitalopram Sertraline Paroxetine	Inhibits reuptake of 5-HT	W: hyponatremia, bleeding associated with impaired platelet aggregation; citalopram should not be used in patients with hypokalemia, hypomagnesemia due to risk of dose-dependent QTc prolongation	Headache, nausea, vomiting, diarrhea, insomnia, sexual dysfunction, decreased appetite (fluoxetine), sedation, dizziness, dry mouth (paroxetine)
SNRIs Venlafaxine Desvenlafaxine Duloxetine Levomilnacipran	Inhibits reuptake of 5-HT and NE	C: uncontrolled narrow angle glaucoma W: hyponatremia, increased bleeding due to impaired platelet aggregation; duloxetine should not be used in patients with substantial alcohol use or chronic liver disease due to risk of hepatotoxicity; risk of orthostatic hypotension and syncope	Headache, nausea, vomiting, constipation, dizziness, insomnia, sexual dysfunction, diaphoresis, increased blood pressure, hypercholesterolemia
TCAs Amitriptyline Clomipramine Doxepin Imipramine Desipramine Nortriptyline	Inhibits reuptake of 5-HT and NE; affinity for reuptake inhibition depends on medication	C: should not be given to patients in acute recovery of a myocardial infarction W: May be fatal if taken in overdose; may cause cardiac conduction abnormalities	Sedation, dry mouth, orthostatic hypotension, seizures (high doses), weight gain, sexual dysfunction
MAOIs Phenelzine Tranylcypromine Selegiline	Increases endogenous concentrations of NE, 5-HT, and DA through inhibition of monoamine oxidase	C: heart failure, abnormal liver function tests, renal disease, use of sympathomimetic, foods high in tyramine content W: Risk of hypertensive crisis with foods and supplements high in tyramine; risk of orthostatic hypotension	Orthostatic hypotension, weight gain, sexual dysfunction, hypertensive crisis
Atypical Antidepressants Trazodone Nefazodone	Inhibits 5-HT reuptake; 5-HT_2 receptor antagonist; blocks α_1 adrenergic and histaminergic receptors	C: liver disease or elevated serum transaminases W: Risk of priapism (trazodone); risk of hepatotoxicity (nefazodone)	Dizziness, orthostatic hypotension, sedation, somnolence, dry mouth, nausea, diarrhea
Bupropion	Inhibits reuptake of DA and NE	C: seizure disorder; anorexia or bulimia; patients with electrolyte abnormalities; W: Risk of dose-related seizures	Headache, insomnia, tachycardia, tremor, dry mouth, weight loss
Mirtazapine	Presynaptic α_2-adrenergic antagonist leading to increased release of NE and 5-HT; antagonist of 5-$HT_{2\&3}$ and H_1 receptors	W: Risk of hyponatremia	Somnolence, increased appetite, sedation, weight gain, dry Mouth, constipation, hyperlipidemia

Adapted from 4,6

Symptom improvement is not experienced immediately and may take a few weeks, but often may take months to see the full benefits (1,2,4). All antidepressants have a black box warning for increased risk of suicidal behaviors and ideation for patients ≤ 24 years old (6). Monitoring includes the patient's symptoms, electrolytes based on the drug class, and suicidal ideation (4,6). Many of these medications should not be stopped abruptly before switching to another agent (1,2,4). The two concerns with antidepressants in conjunction with other medications are hypertensive crisis and serotonin syndrome (6). Drug-drug interaction reports should always be evaluated when starting a new antidepressant (6).

Psychotherapy, "talk therapy," can be used as a monotherapy for mild depression (1,2). When a patient is experiencing moderate to severe depression, psychotherapy is used along with antidepressants. There are several types of psychotherapy such as cognitive behavioral therapy (CBT), group therapy, interpersonal therapy (IPT), and problem-solving therapy (1,2).

Electroconvulsive therapy (ECT) is a medical treatment that is used in severe major depression or treatment resistant depression (1,2). This treatment is an outpatient procedure typically three times a week for two to four weeks (2). This treatment has been around since the 1940's and has been researched for many years and is recognized as effective and safe and no longer considered a "last resort." (1).

Depression is a prevalent and treatable disease. There are several different drug classes, and medications within those classes, that can be used for treatment. Several other nonpharmacologic options are also available as adjuncts and alternatives. With the right treatment, and time, patients can experience an increased quality of life, as well as decreased symptoms of their depression.

References:

1. What is depression? American Psychiatric Association website. Washington (DC): American Psychiatric Association; 2021. Available from: https://www.psychiatry.org/patients-families/depression/what-is-depression. Accessed: September 14, 2021.
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The P&T Committee met for its quarterly business meeting on February 9, 2023

Highlights of this meeting include:

Dr. Paul Johnson has accepted the Medicaid Medical Director position. Though he will no longer be a voting member of the P&T Committee, he will remain active as an ex-officio member.

Concurrent use of onabotulinumtoxinA (Botox) and the CGRP inhibitors approved for prevention of chronic migraine was reviewed. Concurrent use will be allowed following a trial of two cycles of onabotulinumtoxinA monotherapy and two months of CGRP monotherapy.

Alemtuzumab, fingolimod, natalizumab and ocrelizumab will be approved first-line for highly active disease.

Long-acting stimulants for ADHD will be limited to one medication only.

A GLP-1 agonist or SGLT2 medication will be allowed first-line for diabetics with a history of ASCVD or risk factors for ASCVD.

Preferred growth hormones will no longer require prior authorization.

Auvelity, Relyvrio, Rebyota, Sunlenca and Briumvi were reviewed. All were limited to indication and referred to the Department of Health for cost analysis and Preferred Drug List placement. Tzield and Leqembi will require prior authorization.

All prior authorization criteria are open for public comment. Comments can be sent by email to alewis13@uwyo.edu. All comments should be received by March 15, 2023. The next P&T Committee meeting will be held May 11, 2023 in Cheyenne. An agenda will be posted approximately two weeks prior to the meeting.

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