**A patient is being seen at your clinic for depression and has been prescribed Zoloft. At today’s visit, she admits to still taking St. John’s Wort. What do you tell her?**

St. John's wort is a flowering shrub widely used in Europe that contains an active ingredient called hyperforin (St. John's wort, 2021). Individuals use St. John’s Wort to treat depression and menopausal symptoms(St. John's wort, 2021). Zoloft (sertraline) is a Selective Serotonin Reuptake Inhibitor (SSRI) which works by increasing serotonin, one of the neurotransmitters that carry messages out to the brain from neurotransmitters, levels in the brain (The most commonly prescribed type of antidepressant, 2019). An SSRI blocks the reuptake of Serotonin which means more serotonin is available for transmitting messages (The most commonly prescribed type of antidepressant, 2019). Combining Zoloft and St. John’s Wort can cause high levels of serotonin to accumulate in the body resulting in something called serotonin syndrome (The most commonly prescribed type of antidepressant, 2019). I would then ask this patient if they experienced any signs and symptoms including “anxiety, agitation, high fever, sweating, confusion, tremors, restlessness, lack of coordination, major changes in blood pressure and a rapid heart rate” The most commonly prescribed type of antidepressant, 2019). I would tell her to discontinue taking the St. John’s Wort.

**A patient asks if they would benefit from taking Aricept from their mild dementia. What is your response?**

Aricept is a medication that improves the function of nerve cells in the brain by preventing the breakdown of acetylcholine, a chemical process of memory, thinking, and reasoning that is usually low in individuals with dementia (Aricept Uses, Dosage, Side Effects, 2021). It is used to treat mild to moderate dementia (Aricept Uses, Dosage, Side Effects, 2021). Contraindications in taking Aricept include a heart rhythm disorder, a history of stomach ulcers, an enlarged prostate or urination problems, liver or kidney disease, epilepsy or other seizure disorder, trouble swallowing; or asthma, chronic obstructive pulmonary disease (COPD), or other breathing disorder or pregnancy (Aricept Uses, Dosage, Side Effects, 2021).

**Your patient asks if he or she should take Propranolol at the beginning of a migraine headache. How do you respond?**

Propranolol (Inderal, InnoPran) is a beta blocker that is also “often falls under a broad category of drugs referred to as oral migraine prevention medications (OMPMs) and is one of the most commonly prescribed for migraine prophylaxis (Linde & Rossnagel, 2017). It is believed that the mechanism of action of Propranolol is that it “helps stabilize the blood vessels in the brain, preventing their dilation. In addition, the drug may reduce the excitability of the brain as well as improve patients' anxiety, helping decrease the frequency of the migraines” (Doherty, 2021). It works by reversing the constriction of blood vessels by “causing vessels to relax and allowing the free flow of blood to the brain” (Doherty, 2021). In order to prevent a migraine, Propranolol is prescribed at 20 mg three to four times a day to start (Doherty, 2021). “Within four to six weeks, a person should experience a decrease in the number of their migraines by at least half, as well as a reduction in the intensity and duration of their migraine attacks (Doherty, 2021).

**A patient requires treatment for his ADHD, but is drug tested at his job and they have a zero tolerance policy. Is there a medication he can take to help his attention and focus?**

The ADA protects qualified employees with disabilities: those who can perform the essential functions of their jobs, with or without reasonable accommodation (Guerin, 2020). It is important to list this medication on the drug screening intake form because “If you have a legitimate prescription, many labs will take steps to make sure they do not report a false positive to your employer (Health Central, 2020). However, there are also non stimulant prescriptions available such as Atomoxetine (Strattera), which boost the amount of epinephrine in the brain (Nonstimulant ADHD Drugs: Uses, Types, Side Effects, and More, 2021) “Strattera works on the neurotransmitter (chemical in the brain that transmits nerve impulses) called norepinephrine (ADHD Medications: Strattera, Antidepressants & More, 2021).

**What is the most commonly used dopaminergic drug used for Parkinson’s?**

Individuals with Parkinson's disease have low brain dopamine concentrations, therefore medications to treat Parkinson's increase or act as substitutes of dopamine (Parkinson’s Disease , 2020). The most effective Parkinson’s disease medication is Carbidopa-Levodopa which is a natural chemical that passes into your brain and is converted to dopamine.(Parkinson’s Disease , 2020).

**What other disorders are many of the Antiepileptic drugs used for? Name 2 of the drugs.**

Divalproex sodium (Depakote) and Topiramate (Topamax) are used in treating migraines “Anticonvulsants are preventive medication, which means it takes about one to two months for them to start working to prevent migraines” (What You Should Know About Anticonvulsants and Migraines, 2021). Anti convulsant are also used to treat bipolar disorder with the medications including carbamazepine (Tegretol), divalproex sodium, valproic acid, or valproate sodium ( Depakote, Depakene ), lamotrigine (Lamictal) (Anticonvulsants for Bipolar Disorder: Types and Side Effects, 2021).

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