

McHenry Western Lake County EMS
Optional CE for Paramedic, EMT-B and PHRN
Herbal Supplements
April 2007

When we are caring for a patient we always ask if they take any medications. Do you ever ask, "*Are you taking any over the counter or herbal supplements?*" You should. Many of our patients do. Did you realize that many of these herbal supplements might interact with prescribed medications? Many patients swear by these supplements because they are "natural" so there is no danger in using them. Well, "natural" doesn't mean safe. Some of these herbal supplements have caused health issues. The FDA regulates these substances as food. Active ingredients are not always known and can affect how your body functions just as over the counter medications and prescribed drugs. Some even contain trace metals or other substances or fillers that are not always included on the label.

The use of herbs is an aspect of folk medicine. Plant parts were gathered to make teas, poultices or powders to cure ailments. According to the Internet site, www.uccs.mun.ca, almost 2/3 of the earth's population rely on the healing power of herbal medicine. For them nothing else is affordable or available. Use of non-prescription drugs and supplements are on the rise. In 1997 Americans spent approximately five billion dollars on herbal remedies.

Herbal supplements have been around since 3700 BC in Egypt, then China, Greece and then the Romans. In early frontier days folk medicine was practiced in a large portion of the population because doctors were only in the larger towns. Plants mostly made up the basic ingredients of the remedies. Some of the plants used were, cherry bark for coughs, sassafras, catnip, horehound and pennyroyal were brewed into teas and used for coughs and colds. Red cedar leaves and twigs were boiled and inhaled for bronchitis. White and black willow leaves and bark were brewed into a tea to treat fevers. These trees contain salicylic acid (aspirin). The pitch from the white pine was used for healing wounds. Powdered bark of hemlock was used to stop bleeding.

People should avoid using herbal supplements if:

- Taking prescriptions or over the counter medications as the combination can cause serious side effects
- Proven medical treatments are available for the diagnosis
- Pregnant and/or breast feeding
- Having surgery
- Younger than 18 years of age or older than 65

Let's take a look at four of the herbs that we have all heard of on the radio and television.

Ginkgo Biloba is supposed to enhance memory, treat headaches and tinnitus. Ginkgo is made from extracts of the ginkgo tree. Any person taking this supplement should inform their doctor if they are using this. Ginkgo interacts with blood thinners including aspirin. It also interacts with non-steroidal anti-inflammatory drugs such as ibuprofen and naproxen. Vitamin E and garlic have interactions with ginkgo as well. This supplement may interfere with platelet function, increasing the risk of bleeding.

Ephedra is a supplement that was very prominent in the news in 2004. This is when the FDA prohibited the sale of dietary supplements containing ephedrine alkaloids because of an unreasonable risk of injury or illness. There are approximately 40 different species of ephedra. Ephedra sinica has been found to stimulate the central nervous system, causing bronchodilation and vasoconstriction. If used in combination with caffeine it appears to cause weight loss.

The major safety issues with this supplement include hypertension, tachycardia, and CNS excitation, arrhythmias, MI and stroke. When used with caffeine or theophylline it can cause difficulty sleeping, nervousness, and stomach upset. It can even be fatal.

If used with MOI antidepressants dangerously high blood pressure and muscle damage, fever and irregular heart rate can occur. If used with other antidepressants it can cause a decrease in blood pressure and rapid heart Rates.

Echinacea has been used for over 400 years as a general "cure all". It was used in the 18th and 19th century for scarlet fever, syphilis, malaria, blood poisoning and diphtheria. Today it is used to reduce the symptoms of the common cold and flu. It is also used to boost the immune system.

It comes from the purple coneflower. The above ground parts of the plant are used to treat colds, upper respiratory infections, and urinary tract infections and slow healing wounds. The root is used for flu-like symptoms. People who are using anti-fungals to treat yeast infections and fungus such as athlete's foot may experience a decrease in recurrence. If the patient is being treated with immunosuppressants for cancer and organ transplants should not use this herb as it may increase the immune response.

St. John's Wort has been used for centuries to treat mental disorders. And nerve pain. It has also been used to treat malaria, burns, insect bites and used as a sedative. Today it is used to treat mild to moderate depression, anxiety, or sleep disorders. It has been shown to interact with drugs used to control HIV infections and chemotherapeutics by decreasing the efficacy of the medications. It decreases the effect of immunosuppressants as well.

There are many, many more herbal supplements available to the general public. Each with their own interactions with over the counter and prescribed medications. Most of these herbs have not really proven themselves as to their effectiveness. When controlled tests were done those that were administered placebos (no medication in the pill), the results were equal. In regards to Echinacea the same number of patients taking the herb contracted colds, as did the ones taking the placebo.

Don't forget that it is very important to know if patients are taking herbal supplements along with other over the counter drugs. It is an important part of your patient assessment.

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Name _____

Your quiz this month is to pick one herbal supplement and tell me it's indications, contraindications, and interactions with prescribe or over the counter medications.