# **Dangers of Over-the-Counter Medications**

Most individuals assume that over-the-counter (OTC) medications are safe and free of serious side effects. When taken as directed, most over-the-counter medications are safe. However this is not true for everyone especially when combined with other over-the-counter drugs or prescription medications. Following are different types of over-the-counter medications and problems that can be seen with their use.

#### Part I: Pain medications:

## **Acetaminophen:**

This is a very popular medication used to treat discomfort. It is mostly known as Tylenol® but is present in many other products such as Excedrin® and Midol® and is in many preparations that treat symptoms of colds and flu. Because it is found in so many preparations, it is very easy to take too much of this drug. This can occur when someone takes plain Tylenol® plus a cold medication over the course of a day. According to recent studies, more than 1,500 Americans have died after taking too much acetaminophen.

The most common injury that acetaminophen can cause is damage to liver cells. This can occur even at relatively low doses of the medication if taken daily for several days. Usually a condition called toxic hepatitis is seen. However, acetaminophen overdoses can lead to fatal liver damage called fulminant hepatic necrosis or rapid liver cell death. Treatment often requires an emergent liver transplant.

Symptoms of liver toxicity include:

- Abdominal pain
- Nausea and vomiting
- Not feeling hungry
- Fatique
- Jaundice (yellow coloring to skin or eyes)

The current recommendation for taking acetaminophen is to limit the daily dose to 3000 mg a day which is six regular extra-strength Tylenol® tablets. It has been proposed that even that dose is too high and doses should be no higher than 2000 mg daily. When combined with alcohol, the toxic effect of acetaminophen may be reached quickly.

# Nonsteroidal anti-inflammatory drugs (NSAID's)

NSAID's are medicines that relieve pain and reduce inflammation. They are used by people with conditions such as arthritis.

Over the counter NSAID's include Advil® and Motrin® which contain the ingredient ibuprofen. This ingredient is also found in many cold and flu preparations. The maximum recommended daily dose of medication is 1200 mg daily. It is also strongly recommended that this not be taken daily.

Naproxen (Aleve®, Naprosyn®) is another nonsteroidal anti-inflammatory drug that can also cause problems when taken in excess or over long periods of time.

NSAID's should not be taken by someone taking warfarin or heparin as this can cause an increased risk for bleeding.

Problems that are encountered with excess doses of this medication include:

- High blood pressure
- Increase risk for stroke and heart attacks
- Increase risk for ulcers and stomach bleeding
- Damage to kidneys
- Ringing in the ears

#### **Aspirin**

Aspirin can be a very beneficial medication and is recommended frequently for prevention of heart attacks and strokes.

Risks associated with aspirin use:

- Stroke caused by a burst blood vessel. Daily aspirin can help to prevent a clot from forming and thus prevent a clot-related stroke however it also increases the risk of bleeding.
- Gastrointestinal bleeding. Daily aspirin use can increase the risk of developing a stomach ulcer. It also can increase the risk of bleeding from an ulcer that is already present.
- Allergic reaction. About 1% of the population has an allergy to aspirin. It can also trigger asthma. Up to 10% of individuals with asthma may have their asthma symptoms worsened due to an aspirin allergy.
- Tinnitus or ringing in the ears and hearing loss. Too much aspirin causes tinnitus which over time can lead to permanent hearing loss in some individuals.
- Kidney failure. While not common, aspirin use has been linked to syndromes that cause acute kidney failure.
- Liver injury can occur with overdoses of aspirin.

# Rules to follow for over-the-counter pain medications:

### #1: Don't take them lightly.

- Check ingredients
- Prescription medications for pain often contain acetaminophen or ibuprofen

#### #2: Read the ingredient label

- Acetaminophen is sometimes abbreviated APAP.
- In other countries, some ingredients have different names. For example, in the UK, acetaminophen is called paracetamol.
- Don't mix and match over-the-counter drugs.

#### #3: Follow the directions

- Always follow the directions on the package
- Generally don't take OTC pain medications for longer than 10 days for pain or longer than 3 days for fever. If symptoms continue, check with your physician.