

Orthopaedic Connection

Orthopaedic Surgery and Cigarette Smoking

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Transforming patient information into patient understanding.

I should tell you from the outset this will not be a one week article. It is more like a mini course. But, I guarantee it will be packed with information that everyone should know.

It is kind of sad though that the people who need to know this information the most, young people, probably won't be reading it.

Most of us started to smoke when we were teenagers. It is the same way now that it has always been. I actually started to smoke secretly when I was 10 or 11 with my friends. Not proud of it. At 15 my parents (who both smoked) said "We know you are smoking so you might as well do it in front of us." So I did. I don't smoke cigarettes now, but I did for years.

What's the Point?

It has been 50 years since the Surgeon General's Report and lots of kids are still starting to smoke.

Getting kids to not start is the only way to reduce smoking to the lowest level possible. I'm done preaching. Now the facts.

Chemistry

Cigarette Smoke = 2 phases

 Volatile phase and particulate phase

Volatile Phase

500 different gases. Carbon monoxide, carbon dioxide, nitrogen, ammonia, hydrogen cyanide, benzene and about 493 more that if I listed them you would all stop reading!

Particulate Phase

Approximately 3500 chemicals which contain the carcinogenic substances. Nicotine, nornicotine, anatabine, anabasine and 3496 other chemicals.

How much nicotine and carbon monoxide do you inhale in each cigarette? Oh, about 3mg of nicotine and 30ml of carbon monoxide, that's all! In one cigarette. Hmm.

I know you are thinking and maybe saying out loud, "What does this have to do with Orthopaedic Surgery?"

I have to set the stage which is important. Think about it as the opening act for a concert star.

Nicotine

Nicotine, as everyone knows who doesn't live in a cave, is the addictive component of cigarette smoke. But, I'll bet hardly any of you knew that nicotine:

- Stimulates parts of the nervous system causing vascular problems
- Causes cells to die
- Is metabolized in the liver
- Excreted in the urine
- Nicotine breakdown products are coming out the body in the urine for 10 days

- Decreases microcirculation
- Decreases oxygen in tissues
- Increases blood clotting

Immune System

Yep, it affects the immune system too.

- Decreases white blood cell function
- Reduces immunoglobulins (you need em')
- Decreased antibody response to infection
- Reduces lymphoid tissue

OK, the opening act is over. Dang, it's a wonder how I got through high school and college with all of that stuff in me.

After an intermission the "Star of the Show" will come out and you will learn what those Camels and Marlboros do to your Musculoskeletal system which is what I deal with every day.

Gratiot County Herald Archive and Office Website

I hope what you have read has raised questions. No problem!

Please log onto www.orthopodsurgeon.com. It has a huge amount of musculoskeletal information in the Website and the Archive of all previous GCH articles.

Check it out and be amazed what you can learn.

Good health. Good life. All the best to you. Be well.

Dr. Haverbush