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Paragon Orthopedic Center

Grants Pass, Oregon



Marijuana's Effect on Bones

If you do not smoke marijuana, there's a strong likelihood that you know someone who does. According to the National Center for Drug Abuse Statistics, there are 55 million active pot smokers in America. With 36.5 million active tobacco smokers in our country, that means more people smoke marijuana than cigarettes. Over half of all states now have it legalized, either for recreational or medicinal use, and the House of Representatives passed a bill in April of this year to federally decriminalize it (the MORE Act, which has not passed in the Senate). With all this use, there is a paltry amount of research about its effects on our bodies, but initial studies provide a glimpse that is troubling. First, some definitions:

-Cannabinoids are the active ingredients in marijuana. There are at least 113 identified and each one has a different effect on the body. There are two popular ones: THC and CBD.

-THC (Tetrahydrocannabinol) is what gives you a "high" from marijuana.

-CBD (Cannabidiol) is not intoxicating and usually derived from hemp because deriving it from marijuana causes it to have higher levels of THC. CBD is used for medicinal purposes and the patient does not feel a "high."

The effects of marijuana can differ based on the method of ingestion, whether inhaled, topically applied, or in food. What we do know is that it:

- Alters the way you process information and impairs judgement/affects your brain.
- Stimulates your appetite.
- Increases your heart rate and dilates blood vessels.
- Like tobacco smoke, contains toxic chemicals that will similarly irritate your respiratory system.

So, what about your bones?

The most recent evidence shows that THC has an inhibitory effect on healing. Researchers found that regular marijuana smokers had a bone density that was 5% lower than a similar group of non-smokers. Users of marijuana are at higher risk of fractures, delayed bone healing, and lower bone density. They may experience post-op complications such as increased opioid use and hyperemesis (excessive vomiting). As for CBD, the non-intoxicating part of the plant, studies suggest it may help bone health, but this research is ongoing. Debate over the benefits and risks of taking marijuana continues as we wait for larger, definitive studies to emerge. According to what studies have shown to this point, it is clear that marijuana is not good for your bone health. There has been no approved standard dosage range for any cannabinoids. Be honest with Dr. Bents and Dr. Van Horne about your marijuana use to have the best outcome for your orthopedic procedures and surgeries.

The following articles were referenced for this newsletter:

[Marijuana in Orthopaedics: Effects on Bone Health, Wound-Healing, Surgical Complications, and Pain Management - PubMed \(nih.gov\)](#)

[Cannabinoids: Benefits, Side Effects, Dosage, and Interactions \(verywellhealth.com\)](#)

[The Effects of Marijuana on Your Body \(healthline.com\)](#)

[Marijuana Addiction Statistics \[2022\]: Usage & Abuse Rates \(drugabusestatistics.org\)](#)