

GOING *to* POT



Your patients use cannabis. With impending full legalization, here's what you need to know

BY DIANE PETERS

Wendy Vale manages many different pains, with trigeminal neuralgia the toughest to bear and manage. For 15 years, the fiftysomething Torontonion has endured facial pain, migraines and musculoskeletal pain. A year and a half ago, Vale (not her real name) added medical marijuana to her already full medicine cabinet.

"It's just another tool in the toolbox. Chronic pain needs a lot of different tools, not just one pill that makes all your troubles go away," she says. She uses a vaporizer, taking in about 0.1 gram of cannabis at a time, to manage her neck and shoulder pain — it also gives her much-needed energy, as pain is so draining. It helps a little for the pain and nausea of migraines.

For facial pain, it's unreliable. "Sometimes the pain is relieved. Sometimes, it makes it worse. It's a gamble. But if I've tried everything else that day, I'll give it a go."

She now has fewer absentee days from her job as a software engineer. She finds only the strains with tetrahydrocannabinol (THC) work, and taking a high dose makes her feel stupid and sleepy and temporarily blurs her vision. Cannabis's side effects are milder than those of some of the other drugs she takes. "The pain impairs me more than the cannabis," she says.

Medical marijuana, such as Vale takes, is legal in Canada, and as early as next summer, recreational pot will be on the up-and-up as well. Now, the dental community is considering its stakes with regard to this drug, which has everyday and long-term implications. Legalization could facilitate more research on its painkilling and anti-inflammatory properties for facial and oral pain. But a wide-open legal landscape could

likewise add to a higher disease burden for new users. The profession and its patients may soon see legal marijuana lead to some big benefits — or a whole lot of smoke.

POT FACTS

While Vale withheld her real name for fear of recrimination at work, medical and recreational pot use is increasingly becoming accepted. After all, cannabis is the most commonly used illegal drug in Canada; almost half of Canadians say they've used it at least once. Medical researchers have investigated the pharmacological effects of cannabinoids, the active compounds in pot, for decades. In 1999, the government allowed the first legal users of medical marijuana and expanded its uses to a shortlist of medical conditions in 2001. In 2014, the government allowed licensed producers to sell pot to people with a doctor's approval, opening up the market. By mid 2017, there were nearly 168,000 medical users in Canada purchasing edible oil, which they can ingest directly or put into food, or dried marijuana, which can be smoked or vaporized.

ACCESS TO MEDS

For someone like Vale, trying medical marijuana starts with a referral from a physician to a cannabis clinic (some will let you self refer if you can document your condition) — her pain doctor wasn't keen at first, but is now pleased it's helping. A clinic doctor may offer a "medical document" (similar to a prescription), and counsellors determine which strain might work best. To get meds, a patient registers with a licensed producer and orders leaves, oil or pills online and has them mailed. "They often run out, or discontinue the type you want. It's a stupid system," says Vale. Patients must check often to see if their desired strain is available

Photo: istock.com

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— but cannot reorder until their 30-day supply runs out. Maybe another producer has it? You can only be registered with one producer at a time, and changing requires paperwork.

The Apollo Cannabis Clinic in Toronto offers an in-person consultation to explain the system to new patients, then manages their meds for a \$60 fee. Many clients are enrolled in research studies and the service ensures they get their doses on time. “What we found was if we did not handle this, we could not do research,” says Bryan Hendin, president of Apollo.

With legalization, there’s a hope that this process will become more streamlined. Since cannabis is still omitted by many drug plans, many may start buying through the same outlets as recreational users. “It’ll give them a lot more flexibility,” says Hendin. “They’ll be able to choose what they like.”

PAINKILLING POWER

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Hendin says anecdotal evidence suggests temporomandibular joint disorder (TMD) and trigeminal neuralgia and neuropathic pain may be relieved by medical cannabis. There’s little research on this, but strains that contain cannabidiol (CBD) might help the oral inflammation of periodontal disease. Tension headaches and migraines seem to be subdued by some strains and may benefit from its anti-anxiety effects.

In future, we may see cannabinoids in facial and oral medications. Axim Biotech, a pharmaceutical company that specializes in cannabinoids, is working on early stage medications for dry socket and oral pain. “We are not there yet,” says CEO Dr. George Anastassov.

The company has a line of oral care products, including mouthwash and toothpaste, called Oraximax, that are derived from industrial hemp and contain no THC. They contain cannabigerol (CBG) and CBD, and target inflammation and bacteria. “Cannabinoids are excellent oral care products,” says Anastassov, who’s also a trained dentist. “There are no other products on the market that target inflammation and contain a natural antiseptic,” he says.

Drug development and basic research take time, and they need acceptance. Hendin says as recently as 2013 he noticed “robust apprehension” among funders regarding cannabis research. Things have changed, but full legalization may help attitudes

further on the funding side, but also make growing research-grade pot a more attractive business — a reliable supply chain will aid research. Since cannabis research is highly restricted in the U.S., evolving attitudes and rules may help open up work there as well.

This emerging drug category comes with flaws: THC is a challenge as it oxidizes easily and, of course, has psychotropic effects. Growers struggle to cultivate plants with consistent levels of cannabinoids. Meanwhile, pot’s painkilling impact varies individually. “Not all people are receptive,” says Hendin. It remains to be seen if cannabinoid products will be better than what’s already on the market. “For TMD pain, we have other drugs that are not just analgesics but muscle relaxants,” says Jose Lança, Assistant Professor, Faculty of Dentistry. “And they have no psychotropic effects,” he adds.

BAD FOR THE TEETH

While medical cannabis shows promise for many aspects of oral and maxillofacial health, existing cannabinoid-containing medications have adverse effects that impact dental health, including xerostomia and orthostatic hypotension. And while we have limited data on any dental implications of vapourizing — health wise, it has caused allergic reactions for some users — smoking pot via a joint negatively impacts the mouth and teeth.

The average joint contains the same amount of tar as 10 to 20 tobacco cigarettes, says Lança. While pot users smoke less frequently than regular smokers, it can be worse on balance. Regular pot smokers often develop xerostomia, which can precipitate caries, gingival hyperplasia and periodontal disease. Pot smoking increases the risk for erythematous edema of the uvula,



Photos: Jeff Comber, IITS

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oral papilloma, leukoplakia and alveolar bone loss. A study published in 2008 in the *Journal of the American Medical Association* that followed over 1,000 young adults found that 26 per cent of those who smoked cannabis more than 41 times in the last year had attachment loss, compared to just 6.5 per cent among those who never smoke.

The impact extends beyond teeth and gums. “For lung cancer, pot smokers have the same risk as someone who smokes tobacco,” says Lança. Pot users hold the smoke in their lungs, making it a trigger for asthma and bronchitis too.

Legalization likely won’t increase the number of smokers that general dentists see. “I don’t think it’s going to lead to rampant use,” says Joel Rosenbloom, a lecturer at the Faculty and staff dentist at Toronto’s Centre for Addiction and Mental Health (CAMH). “We’re already there. Every single dentist is seeing people who are cannabis users.” But when it’s legal to smoke, dentists may hear more honest disclosures. “It might open up the conversation,” he says. An anonymous dentist reported a patient’s recent disclosure regarding his regular pot use, saying imminent legalization made him feel safe to talk. Since most of pot’s oral health issues can be mitigated by better oral care, this is a discussion dentists want to have.

THE INFO GAP

Legalization could worsen another ongoing problem: hype. Already, the internet is scattered with weed-focused web sites that laud the benefits of pot and neglect its drawbacks. “This information is not supported by research,” says Lança. Increasingly, healthcare professionals will need to do their own research through the medical literature and transfer that information to patients.

A key myth to dispel is that marijuana is not addictive. About nine per cent of users become addicted — that stat surges to 17 per cent for people who started using in their teens. Since today’s marijuana contains more THC than in the past (and there are increasing worries that street pot is sometimes laced with opioids such as fentanyl), it’s more addictive now. It’s dangerous to use before driving and can trigger psychosis. Cannabis can interact with prescription drugs and increase side effects such as drowsiness and bleeding risk.

With a lag on the drug development side, marijuana lends itself to self-medication. And while experimentation may work for some, users risk only partially managing their symptoms while exposing themselves to side or adverse effects.

The dental profession needs more data to know how cannabis and cannabinoids in pharmacological drugs will impact practice. “Where the knowledge is at right now, we need to keep researching for years,” says Hendin. Tinkering with the dose-effect of THC, a current project at Apollo, is painstaking, and the medical literature offers little guidance.

In the meantime: “if it helps, that’s great,” Vale’s pain doctor told her. It’s an attitude dentists could take. They can prescribe cannabinoid-containing medications, or refer patients in pain to cannabis clinics, along with warnings about the system, lack of evidence and risks. They can support recreational users with their oral hygiene. Otherwise, dentists should read up on the evolving facts and wait for the smoke to clear on this ubiquitous, and surprisingly complex, everyday drug. ■



POT AND ITS CANNABINOIDS

Cannabis contains dozens of different types of cannabinoids. Of the hundreds of strains, each has a different selection and concentration of these active ingredients.

- Tetrahydrocannabinol (THC), the psychoactive ingredient in pot, has analgesic, anti-inflammatory, antiemetic, anti-spastic and muscle relaxant properties.
- Cannabidiol (CBD) reduces pain and inflammation and is anti-spastic and anxiolytic.
- Cannabinol (CBN) has a mild psychoactive effect and is anxiolytic.
- Cannabigerol (CBG) has antibacterial, anti-inflammatory and immunomodulating properties.