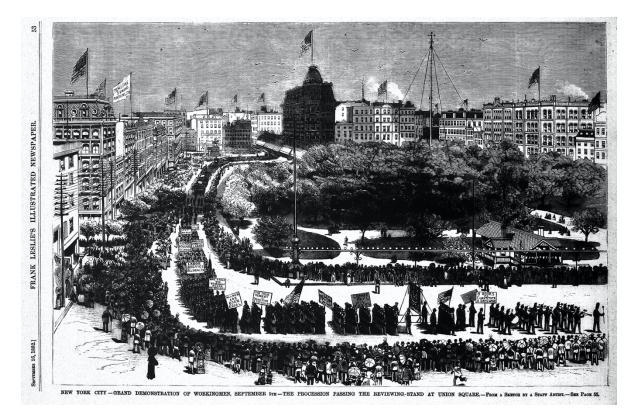
FROM THE DESKS OF DAVID L MELLMAN MD & JEANNETTE GUERRASIO MD

Sept 5, 2020

To Our Patients,

Happy Labor Day to all of you who have worked hard for so many years! I can report that neither Dave nor I will be on call Monday. We will have our feet elevated as we recline and enjoy the aroma of steak, seafood and garden grown vegetables on the grill. After years of promotion by the Central Labor Union and Knights of Labor parading through New York City, Labor Day became a federal holiday in 1894. It is also known as the "unofficial end of summer."



I just love historic drawings and old photos which fit well with Dave's love of history. Did you know that before medical school, he was a history major in college? He has recommended some wonderful history books and opened my eyes to a whole new genre of literature! (I just finished *Destiny of the Republic* by Candice Millard.)



Tip of the week:

• From the doctor who has been known to prescribe ice-cream, eat some dark chocolate! In a 2014 Swiss study, researchers found that 50 grams of dark chocolate a couple of hours before a stressful event blunts the rise of stress hormones. (P.S. The doctor also says, be careful as it can cause constipation and keep you awake if you eat too much!)

Marijuana: Medical and Recreational

I got a request this week to write about medical and recreational marijuana for the elderly. Because our practice ranges from 17-101 years old, I hope to address the needs of all age ranges, but will point out anything particularly relevant to those over 65. Unfortunately, medical research considers anyone over 65 elderly although Dave and I could have a strong argument otherwise just by showing off the patients in our practice. So far, marijuana has not been studied in the elderly, so I can only speak from my experience.

In preparation for this article, I conducted a review of the medical literature and all of the high quality research that has been done on marijuana. The current limitation of medical research is that it is a relatively new field of study, even though marijuana use has been prevalent for centuries. Many of you know that the research was limited because marijuana was classified as

an illicit substance and this greatly limited the ability to do research and find funding in the United Stated and many other countries with research programs. This is what we currently know according to the medical literature:

Benefits

- The most extensive study was done across 20 states and involved thousands of participants. There was moderate evidence that cannabinoids might benefit patients with chronic pain or muscle spasticity (like Multiple Sclerosis). There is poor evidence that it helps prevent nausea, vomiting from chemotherapy, leads to weight gain in patients with HIV, or lessens tic severity in Tourette Syndrome. There is *no* evidence that it helps with depression, anxiety, psychosis, hepatitis, Crohn's disease, Parkinson disease, or glaucoma.
- Among Medicare Part D beneficiaries, states with marijuana had less prescriptions for anxiety, pain and sleep disorders.

Harms

 In the same extensive study cited above, cannabinoids were significantly more likely than placebo to be associated with dizziness, nausea and vomiting, sleepiness, disorientation, confusion, and hallucinations



- Mortality was significantly higher for users who has suffered a heart attack
- Marijuana increases one's risk of heart attacks and death from HTN
- Worsens Post Traumatic Stress Disorder (PTSD) symptoms and results in violent behavior in some people with PTSD
- Can affect blood flow in the brain while using and for up to 28 days after, which may explain why it worsens cognitive brain function, decreases connections between brain regions, and decreases IQ
- Smoking marijuana produces 5x greater levels of carboxyhemoglobin and 3x as much inhaled tar than tobacco, plus the smoke is retained in the lungs longer and is inhaled with no filter = does much more lung damage than tobacco (comparing average daily marijuana use with average daily tobacco use)
- Marijuana use is linked to increased mental illness (this may be the result of patients trying to self-treat their mental illness, however there is some question that marijuana may cause mental illness in some patients)
- Increase risk of pre-term birth and lower intelligence scores in their children at age 6; of note marijuana is detected in breast milk for over 6 days after use
- People who use marijuana regularly find it hard to stop, 9 % get addicted
- Marijuana intoxication can have severe unpredictable symptoms including psychosis (more commonly seen with edibles)
- Early initiation of marijuana is associated with alcohol abuse, later drug use and suicide
- Heavy use can cause excessive vomiting and rarely, psychosis with hallucinations
- Recent use of marijuana driving doubles the risk for causing a car accident

I have given you the facts from the medical literature. Here comes my biased experience. Many of you know that I spent years working in the hospital at the University prior to working with Dave. I worked in the emergency department, on the general medicine floor, the oncology (cancer) floor, and on the geriatric floor. Many people like marijuana because, as stated above, it decreases connections between regions of the brain. This includes separating the area that perceives pain from the area that allows one to suffer. Marijuana allows some patients to experience pain without feeling the suffering that goes along with pain. This is the numbness and disconnectedness that you see in heavy or longstanding marijuana users. This is why there is some evidence that it helps with pain and muscle spasticity. Coincidentally, benzodiazepines medications like, Xanax, Ativan, Klonopin, and Valium (generically named alprazolam, lorazepam, clonazepam, and diazepam) have a very similar effect without some of the negative side effects.

It is very important as with every treatment to balance the benefits and harms, which is why I present you with all of the common harms as well. Most of my patients with cancer tried marijuana to help prevent nausea and vomiting while they were receiving chemotherapy, but the vast majority didn't find it worth the side effects. Of those who continued to use marijuana during their cancer treatments about three quarters had been chronic users prior to their cancer diagnosis. I noticed the same among my HIV and AIDs patients. I have seen patients use it successfully for pain, but then suffer more injuries and surgeries from falls, job loss, addiction, or car accidents etc. I have some serious concern for the future brains, lungs and hearts of young adults who use marijuana daily especially since marijuana has become so much more potent. There is still so much we don't know about the future effects, many of which we know at least know are irreversaible.

As for the elderly, I definitely support the use of topical CBD lotions for joints, even the products that have some THC. These seems to have anti-inflammatory properties that have helped painful arthritic joints. Topical medications are much less likely to get into the body and cause the more deleterious effects. I am much more concerned about THC that is smoked, vaped, inhaled, ingested or placed under the tongue.

By the time you are over 65, people have less reserve



when it comes to cognitive function and balance. Anything, including marijuana that impairs such function should be avoided. Many of you have already heard Dave and I tell you to avoid Benadryl for the same reason. I have routinely admitted older patients to the hospital with falls and severe injury, confusion, combativeness, dizziness, disorientation, heart attacks, and hallucinations from marijuana. While it may seem promising that seniors in states with marijuana had less prescriptions for anxiety, pain and sleep disorders, they also are placing themselves at risk. I don't recommend it, at least not without a conversation with your doctor about how those risks compare to the risks of the medications that they are already taking for sleep, anxiety and pain.

That being said, if you are using marijuana, please let us know. I'm not going to yell at you and it is in your best interest to tell us, so that we can make sure that it doesn't interact with other medication that you are taking. I promise to be open minded, to acknowledge my bias, and to listen because this is such a new area of medicine that I, too, have so much to learn. I might be able to use your experience to help others, which is my goal.

Questions for Dave and I

1. Can I sign up to get my flu shot?

It makes us so happy to hear that you have been listening and want to get a flu shot, especially this year. If you haven't done so already, please email Sarah at <u>sarah@coloradocme.com</u> and let her know. She will notify you as soon as the flu shot clinic schedule is available. Our plan is to offer the flu shots in October so that your immunity will last through the flu season.

I'm very excited about the Sept 27th Zoom talk, because I have been working on it for the past few days. We will have a guest speaker for added insights. The topic is "What's New in Preventative Health?" and we plan to cover interval training, fasting diets, air filters, bone broths, changes in vaccination recommendations, meditation, etc. More to come. Remember if you are looking for old newsletters or information from prior education sessions you can find them at www.jeannetteguerrasiomd.com

Enjoy the outside and keep your distance... but not from us!

Jeannette and Dave

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