

Dr. Malka Gives Grand Rounds in Monterey

Deborah Malka, MD, provided an introduction to cannabis therapeutics at the Community Hospital of the Monterey Peninsula (CHOMP) July 24. The amount of relevant material is so vast —no one in her audience had heard a word about cannabis in medical school— that a 45-minute talk is barely enough time to cover the basics. Malka managed to do it concisely yet thoroughly.

Some 50 doctors affiliated with the hospital received Continuing Medical Education credits for attending Malka's "grand rounds" presentation. They gave her their undivided attention and the questions they asked were practical. Nobody expressed any dismay about the prospect of including Cannabis as a treatment option.

Malka explained the "entourage effect" that distinguishes cannabis from dronabinol (Marinol). "Many conventional medicines originate from a single active ingredient of a plant," Malka said. "This is the opposite of herbal medicines which may contain dozens of different ingredients. Herbalists believe that the different components are made more or less powerful depending on the others that are present."

Malka had been a medical director of Medicann, a chain of clinics in California, from 2007 through 2010. She summarized the results of a study led by Helen Nunberg, MD, enumerating the conditions that MediCann patients were using cannabis to treat.



Malka fields a question after her talk.

Malka, who is board certified in Integrative Holistic Medicine, cautioned against recommending cannabis to patients with heart problems or personality disorders with unstable mood; to treat pain without determining its cause; and to those "at a young age."

She advocates its use because: "Our bodies can change and heal with the help of herbs. Cannabis is one of the most potent herbs known to mankind, and has a long history through many cultures. Cannabis can be home grown and is often more affordable than other medicines. Cannabis can be applied in a variety of beneficial ways. Cannabis has multiple beneficial actions and may be able to replace or reduce a host of other medications. There are some conditions in which cannabis is the most potent medicine available. As we heal we can reduce the use of cannabis and be free of medication entirely!"

The hospital pharmacist who followed Malka, Mariann Novarina, agreed that the compounds in the plant show great medical potential, and advocated prompt rescheduling to enable research.

Assistant District Attorney Berkley Brannon described "the legal landscape" accurately and informatively. His bottom line: look to upcoming California Supreme Court rulings to clarify state law.

The moderator, Michael R. Smith, MD, a gastroenterologist, ended the two-hour session with an anecdote about a patient whose severe back pain required such high-dose opioids that he could not evacuate, disabling him to the point that he could no longer work. "We finally tried him on marijuana," said Smith "and he was able to reduce his opioid use significantly. His bowels were able to function. And he could go back to work."

Smith called on the hospital's addiction specialist, who had not posed a question or asked to comment, and who seemed befuddled by having to



Drs. Michael Smith and Deborah Malka, Assistant DA Berkley Brannon, and pharmacist Mariann Novarina at the Community Hospital of Monterey's CME presentation on cannabis.

comment on the herb that Malka had been praising. He made some empty generalizations like, "We know that any drug will pose problems for certain people," and concluded with the revealing observation, "I know my job is safe."

Malka sees patients for Compassionate Health Options, a cannabis-oriented practice, in Monterey and Santa Cruz. She used

the occasion to debut a chart she has designed showing the range of delivery systems for Cannabis-based medicine.

The Residents of the Monterey Peninsula are truly lucky to have such a well-designed facility. It's rare that a building put up after World War Two doesn't degrade rapidly. CHOMP was clean, quiet and calm.

—O'S News Service

Patients' Diagnoses

Low Back Pain 10,120	ADD 635
Radiculopathy (pinched nerve) 1,896	Bipolar DO 598
Insomnia 8,641	Cancer (unspecified) 502
-Due to pain 3,013	Esophageal Reflux 485
Headaches 5,749	Irritable Bowel Syndrome 426
-Migraine 2,376	High Blood Pressure 426
Anxiety/Depression 5,455	Asthma 378
Muscle Spasm/Pain 4,238	Glaucoma 280
Traumatic Injuries 3,964	HIV 232
Arthritis 3,799	Epilepsy 258
-Osteoarthritis 1,799	Prescription Drug Side Effect 242
-Post Traumatic 1,292	Multiple Sclerosis 169
-Rheumatoid 352	Alcohol Dependence in remission 115
Neck Pain 3,231	Schizophrenia 56
-Radiculopathy (pinched nerve) 506	Tourette's/Tics 20
Thoracic (Mid) Back Pain 1,683	Quadruplegia 18
Neuropathic Pain /Paresthesias 1,677	Parkinson's disease 13
Limb Pain (unspecified) 1,587	Sickle Cell Disease 12
Nausea 1,577	Obesity 7
Anorexia 1,344	

PAIN WAS THE PRIMARY DIAGNOSIS CONFERRED BY PHYSICIANS ON 70% OF PATIENTS getting Cannabis approvals from the MediCann chain of clinics, according to a study by Helen Nunberg, MD, and colleagues published in the *Journal of Psychoactive Drugs*, April-June, 2011.

RAW
Cannabis can be eaten or juiced raw, making a "super-green" food, high in chlorophyll, oxygen, vitamins, minerals, antioxidants, and cannabinoids. It is thought that raw cannabis has medicinal activity due to the presence of cannabinoid-acids, non-psychoactive precursor molecules found in the living plant. These precursors are unstable upon harvesting. Drying or light exposure causes them to turn into the more well known cannabinoids. It is problematic to eat raw, due to the stachytarides that may irritate the mouth, throat, and stomach. The flowering tips are usually full of a sticky resin which sticks to the mouth if chewed. One can avoid these problems by eating tender young leaves right off the plant or juicing leaves and buds. Raw delivery requires a daily, plentiful, fresh source of cannabis, limited by the growing season and access to fresh plants. Cannabis is easily absorbed through the intestinal tract into the bloodstream.

INGESTION
Cannabis can be ingested in many forms. Smoking cannabis is the classical method of marijuana delivery. It has long been thought that marijuana posed a health risk if smoked. A recent study found leads to a longer, stronger, and much more physical cancer. no association between marijuana smoking and lung and much more physical cancer. "We hypothesized that there would be an effect than smoking. Because positive association between marijuana use and ingestion provides a longer, lung cancer, and that the association would be slower release of cannabinoids, it more positive with heavier use. What we found may be a better choice for chronic instead was no association at all, and even a conditions requiring maximum suggestion of some protective effect." Smoke dosage. It can be cooked directly into is still irritating to the throat and lungs and edibles with cannabis in herbal or resin cause bronchial inflammation and a form as an ingredient, or made into butter or oil that is used to prepare foods, or packaged in joints or blunts, or in a pipe. Usually into capsules. Although eating is a good way of absorbing marijuana into the bloodstream, preferred, but leaves can be smoked higher amounts must be used in a preparation in as well. Smoked forms of cannabis order to make the product effective - up to three that are concentrated, include times as much cannabis is required when taken orally keif, hash and hash oil. The compared to smoking Cannabis must be absorbed cannabis is inhaled, medicinal through the intestinal tract into the bloodstream, also compounds pass through the requiring the butter, oil or food to be digested as well. lungs into the bloodstream.

SMOKING
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VAPORIZING
Vaporizers are devices that heat cannabis, or any dried herb, to a specified temperature, below its ignition point. The temperature chosen for cannabis is 280-200°C (356°-392°F), which releases cannabinoids as a vapor without smoke. Vapor ideally contains no particulate matter or tar, and significantly lower concentrations of noxious gases such as carbon monoxide. The wide range of results from tests of different vaporizers suggest that the choice of vaporizer is a major factor in determining extraction and delivery efficiency as well as the amount of harmful byproducts produced, or not produced. Some vaporizers with poor efficiency may require up to twice as much for the same delivery. Many vaporizer designs are now available, including portable hand-held models. The cannabis is inhaled, medicinal compounds pass through the rather than requiring digestion as with other "edibles". Cannabis lungs into the bloodstream. is absorbed through mucosal surfaces into the bloodstream.

SUBLINGUAL
Cannabis can be delivered by mucosal absorption in a rapid, dose measured manner as a tincture. Tinctures are extracts of cannabis into an organic solvent, such as alcohol or glycerin, a process which retains all the cannabinoids. Tinctures are a classical method of herbal delivery, used for centuries to prepare cannabis medicines. The tincture is best taken sublingually (under the tongue) from a dropper bottle or delivered by a mouth spray via an atomizer bottle. They can be mixed with water and swallowed as well. In tincture form cannabinoids have a long shelf life, up to several years, and are protected from degradation, making this ideal form of medicine for infrequent use or travel. Sativex, produced by GW Pharmaceuticals, is a standardized extract made from cannabis plants, delivered as a mouth spray. Each spray of Sativex delivers a fixed dose of 2 mg THC and 2.5 mg CBD, and contains other active cannabinoids and plant-derived constituents. Sativex is available only in research trials in the US. Other sublingual delivery formulations include lozenges and lollipops. They dissolve in your mouth quickly, rather than requiring digestion as with other "edibles". Cannabis is absorbed through mucosal surfaces into the bloodstream.

TOPICAL
Cannabis can be applied topically for treatment of local symptoms such as muscle spasm, inflammation or pain. Skin disorders or peripheral pain conditions in particular, do well with topical cannabis. Cannabis is most often extracted into alcohol, oil or petroleum jelly for topical application. Topical alcohol rubs are ideal for arthritic joint pain or sore muscles. Salves, balms and lotions may be used anywhere you would use a first-aid ointment. Eczema, psoriasis and skin infections respond to topical cannabis. It may also be used for stopping migraine headaches by rubbing on the temples. Applying a cannabis preparation to the skin does not affect central receptors, eliminating psychoactive effects on memory, cognition and mood. Cannabis must be absorbed through the layers of the skin. Preparations containing DMSO are absorbed through the skin more effectively.

DELIVERY OF CANNABIS

Poster showing the variety of methods by which cannabis-based medicines are delivered was distributed by Deborah Malka, MD, to doctors attending her grand rounds presentation in

Monterey. Concept and text by Dr. Malka, design and lay-out by Jennie Kaye. Posters are available for wholesale and individual distribution. Inquire by e-mail: dmalka@comcast.net.