March 12, 2019 Dr. Jay Robinow Radiation Oncologist Providence Medical Center, Kansas City, Kansas

Cancer is becoming a more common diagnosis. Our population is aging which increases the incidence. Cancer survival is continuing to improve due to several Factors:

Improved screening leading to early detection and better outcomes in treating Early stage diagnoses.

Improved surgical techniques which reduce acute morbidity and mortality. More accurate radiation treatment using improved use of sensitive imaging to target cancer and treatment planning to better exclude normal surrounding organs.

More effective and aggressive use of conventional chemotherapeutic drugs. Designer drugs that work on immunologic or targeting principals to radically improve outcomes and provide second and third treatments after previous treatment progression.

Along with improved and more intensive treatment, patients also need ongoing and improved supportive care which is necessary for them to cope with the symptoms of the cancer itself and the toxicity or side effects caused by the treatment.

Cannabinoids have a proven role in three areas of symptom management for patients with cancer and their treatment.

Pain, nausea and anorexia are critical and central symptoms in cancer patients. Effective management of these distressing symptoms has a profound effect on the quality of life.

The foundation of chronic cancer pain management is narcotic analgesics augmented by acetaminophen or non-steroidal anti inflammatory medications. There are now emerging studies that show that cannabinoids are effective for chronic pain management. Pain that is refractory to opioids alone may respond well to Cannabinoid treatment alone or in combination with ongoing opioid use. Nausea can be severe when patients are receiving chemotherapy or radiation. Response to current anti-emetic therapy is usually effective. There are patients who are refractory to conventional anti-emetic treatment. This can result in life-threatening vomiting and dehydration and require repeated hospital admissions for IV fluids and intensive medications. Cannabinoids offer an effective alternative in nausea control to commonly used anti-emetics.

Anorexia (appetite loss) is a distressing symptom for patients undergoing treatment as well as patients who are living with cancer. Appetite loss leads to weight loss leading to weakness, immunologic decline and ultimately a patient's demise. Cannabinoids are effective in reversing anorexia and preserving patients weight.

Cannabinoids are also useful in treating chronic anxiety and insomnia. While these symptoms are not usually as distressing as uncontrolled pain, nausea and anorexia, managing anxiety and insomnia effectively add to a patients quality of life and should be ameliorated .

Currently there is an oral form of one cannabinoid, dronabinol. Trade name is Marinol. While it is effective, it is not the only effective cannabinoid and is limited to pill form. Expanding available cannabinoid and delivery choice will be a therapeutic gain for our patients. I am in favor of metered inhalant systems that give measured doses to proper therapeutic levels. Other systems with oils and creams may provide alternatives. Burned product is not a treatment of choice in cancer care as this can cause further damage.

As an oncologist, I support the legalization of medical cannabinoids. It will be a significant improvement in symptom management in our patients.