Ryan Yuan, OD

ASCO and its Ethics Educators Special Interest Group are pleased to announce Ryan Yuan, OD, as the winner of the 2020 Student Award in Clinical Ethics. Dr. Yuan graduated this year from Southern California College of Optometry at Marshall B. Ketchum University. His winning essay, “Ethics of Ocular Pain Management,” appears below.

The Student Award in Clinical Ethics competition, sponsored by Alcon, is open to optometry students during any point in their professional program at an ASCO-affiliated school or college of optometry.

The winner receives an engraved plaque and $1,000. ASCO thanks all the students who submitted essays.

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Ethics of Ocular Pain Management

By Ryan Yuan, OD

Case Description

RR is a 55-year-old Native American male with a complicated ocular history. Diagnosed at an early age with keratoconus, he underwent penetrating keratoplasty OU in 2012. He later contracted bacterial and fungal keratitis on the corneal grafts and developed secondary steroid-induced glaucoma, which was managed with tube shunts OU. In 2018, he experienced blunt force trauma OS, which caused corneal wound dehiscence, displacement of his posterior-chamber intraocular lens, and a retinal detachment. After open-globe repair, RR was prescribed scleral contact lenses OU; however, the poor fit of the lenses caused mechanical exposure of the tube shunt OD over time. Endophthalmitis caused by methicillin-resistant Staphylococcus aureus eventually developed OD, and the condition progressed to a blind, painful, hypertensive eye. RR had been treated most recently with diode cyclophotocoagulation and retrobulbar chlorpromazine to manage the pain.

RR’s medical history is remarkable for opioid abuse. According to his hospital records, RR had been prescribed 19 pain medications from 16 different providers over the years. He presented to our clinic asking for specific medication to alleviate the pain from his phthisical, hypertensive right eye. Given his ocular treatment history and prior opioid use, what ethical factors should be evaluated prior to initiating therapy?

Ethics Considerations

Optometrists are held to an ethical standard that requires morally responsible prescribing. For those with the relevant credentials, should opioids be prescribed to a patient with a history of misuse? Are there long-term consequences that need to be assessed? Should his request for treatment affect the clinical decision-making? Is there an optometric standard of care that can be applied?

The Opioid Epidemic

In 2018, the Centers for Disease Control and Prevention (CDC) estimated that more than 10 million people in the United States age 12 years and older reported misuse of prescription opioids. It has also been estimated that more than 47,000 deaths, or nearly 129 deaths per day, from opioid overdose occurred in 2017. Examples of opioids include, but are not limited to, natural opioids (morphine, codeine), semi-synthetic opioids (hydrocodone, oxycodone) and synthetic opioids (fentanyl, tramadol).

Few ocular conditions warrant opioid use; however, opioids may be prescribed for post-operative refractive surgery pain and can be considered in serious cases of ocular trauma, endophthalmitis, corneal hydrops or neovascular glaucoma.
Credentialed optometrists who hold a Drug Enforcement Administration (DEA) license are limited in the type and quantity of opioids they can prescribe. Their role in the opioid epidemic remains to be seen. Nevertheless, any physician with the ability to prescribe potentially addictive and fatal medications must prescribe with ethical considerations in mind.

**Optometric Values**

Like all healthcare providers, optometrists abide by codes of ethics and values that are reminiscent of the historical Hippocratic Oath; namely, the principles of **beneficence, non-maleficence, autonomy and justice.**

**Beneficence:** The “do good” principle entails that the optometrist must take actions that are in the best interest of patients and their families. On the surface, it seems easy to apply in the everyday life of optometrists as they adhere to the optometric standard of care with refractions, ocular health examinations and the sale of ophthalmic devices with the goal of providing right and excellent care. Probing deeper, however, the optometrist must ask how to “do good” as it relates to pain management, such as in the case of RR. Utilizing the knowledge of ocular pathophysiology and the corresponding therapeutic options, the optometrist must weigh the risks and benefits of each modality. Would it be beneficial not to prescribe medication to RR? He has a legitimate reason for pain, but would his pain abate with over-the-counter oral analgesics, or does it warrant a prescription for oral opioids?

**Non-maleficence:** The optometrist may have good intentions in prescribing; nevertheless, a second layer of ethical consideration requires him/her to assess whether the prescribed treatment would cause harm, either immediately or in the future. It is well-known that physical dependence can form when opioids are used regularly, and the DEA ranks controlled substances (I-V) based on potential for abuse. Hydrocodone, specifically, was a widely used Schedule-III drug that was moved to Schedule II in 2014 due to higher addictive properties. In most states, DEA-licensed optometrists can prescribe Schedule III-V drugs. Specific conditions for Schedule II allow optometrists to continue prescribing hydrocodone. Though the immediate effects of opioids would bring pain relief, long-term use has been linked to increased tolerance, depression and risk of death related to overdose.

Given RR’s long history of opioid misuse, would prescribing cause him long-term harm? Do the benefits of opioid treatment today outweigh possible future risk? By not prescribing, will he become more volatile in his behavior and drug-seeking tendencies?

**Autonomy:** Because RR specifically requested pain medication for his ailment, the principle of patient autonomy presents. According to this doctrine, the optometrist must regard the patient’s requests when it comes to treatment options; that is to say, to a certain extent. If a patient requests medical treatment when there are no clinical findings to justify medication, the optometrist should not oblige just to satisfy the patient’s wishes. The doctor’s clinical judgment must be respected in all patient-doctor relationships. On the other hand, the optometrist ought to be morally responsible by informing and including the patient in all treatment decisions.

Is it ethical to refrain from presenting opioids as a treatment option if there is potential for drug abuse? What if the patient’s wishes differ from the optometrist’s desired treatment? Medical paternalism is an exception to patient autonomy in cases involving young children or the mentally incompetent. Could it be argued that RR is not fully competent in his decision-making due to his addictive tendencies?

**Justice:** Philosophically, justice typically asks who to “save” given hypothetical scenarios of scarce resources and patients suffering from differing levels of morbidities. In the context of optometry, justice can be applied instead as the duty of the optometrist to treat all patients fairly and ethically. Optometrists must adhere and apply to the relevant standards of care accordingly. In cases such as RR, there are no customary opioid-related treatment recommendations. In fact, the Wills Eye Manual only mentions opioids in the treatment of chemical burns, band keratopathy and dacryocystitis. The CDC and American Optometric Association provide loose guidelines for prescribing and propose that an opioid prescription of three days or less will be sufficient for most conditions. From this it can be inferred that opioid prescriptions should be considered on a case-by-case basis as not all situations are the same.

Would it be ethical to refer the patient to another provider who may be more qualified to handle his type of care? If RR was a personal family member, would the level and method of care be handled any differently?

**Conclusion**

All things considered, RR’s case was co-managed with an ophthalmologist, and it was decided that prescribing a five-day supply of Tylenol 3 (which contains acetaminophen and codeine) would be both beneficent and justified. RR, on the other hand, quickly reported that Tylenol 3 would not be strong enough for his pain. The ophthalmologist then recommended...
another retrobulbar injection of chlorpromazine. Chen et al. reported that retrobulbar chlorpromazine is an effective analgesic with an efficacy lasting from three months to a year. This treatment option would protect RR from potential opioid abuse, and the dialogue allowed RR to have a say in his medical care. However, the fact that RR recently had a retrobulbar procedure and still reported pain reflects the reality that 33% of patients with retrobulbar chlorpromazine treatments may need alternative interventions to manage pain. With RR’s ocular history and current condition, the last treatment option discussed was enucleation for his phthisical eye. Idowu et al. reported that long-term pain relief and discontinuation of oral analgesics was achieved in 100% of patients with enucleated or eviscerated eyes. It remains to be seen whether this treatment would provide RR with the lasting pain relief he seeks. Nevertheless, the next ethical issue at hand should be addressing his drug-seeking tendencies.

References