

Oxycontin and Podiatry

Biomechanics can reduce the need for narcotic analgesia.

BY MICHAEL M. ROSENBLATT, DPM

o discussion of Oxycontin (oxycodone) and heroin can be complete without comparing their molecular structures, which are nearly identical (Figures 1 and 2). This is not usually discussed when doctors talk about narcotic analgesics. But drug-addicted people are very much aware of their similarities. It is not an exaggeration to say that they are virtually interchangeable. Any physician prescribing Oxycontin needs to be aware of this.

The Epidemic of Heroin Addiction

According to CDC, heroin addiction directly related to prescription drug abuse has now become an epidemic in the U.S.^{2.5,2.6} From the old days of "cannery row" and ancient Chinese opium dens, the dark history of narcotic addiction raged. "Good people" were never included in that cadre. No longer. Your neighbor, your good friend, your daughter, your cousin and even your physician

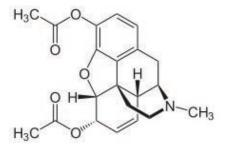


Figure 1: Heroin Molecular Structure

may now be addicted to heroin.

Heroin is cheaper and easier to obtain than Oxycontin, which is considered the best "hit" by frequent drug abusers. "Oxy" (as it is now called) is considered "valuable" because of its pharmacologic purity. Street heroin is often cut and mixed with all kinds of fillers in order to extend its street price. Oxy is pure drug. It commands a much higher street value than raw heroin.

A single dose of cut heroin (0.1 gram) costs, on average, 15-20 dol-

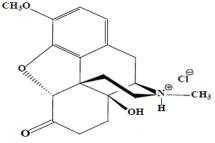


Figure 2: Oxycontin Molecular Structure

lars in Ohio.³ That is comparatively cheap compared to crack cocaine, which may be double. But as the addict develops more tolerance, that can rapidly escalate to 150-200 dollars/day.³ Consider the arithmetic: A 200 dollar/day habit is 1400/ week, or 72,800 dollars/year. Unfortunately, physicians and dentists can usually "afford that." But they also have access to their own prescription pad. A 200 dollar/day habit can easily double in less than a year.

Continued on page 78

Oxycontin (from page 77)

Tolerance usually allows addicts to take concentrations of narcotics that would kill people without narcotic tolerance. Experts now believe tolerance (mixed with the drug-seeking behavior) is actually a brain disease.⁹

Post-treatment relapse is a mortal danger to addicts. All drug treatment programs explain those risks to their patients. Tolerance is greatly reduced (during abstention), and the addict, when confronted by their "usual" dose, thinks it will just lead to a good "high." But that dose can lead to respiratory depression and death, especially if there is nobody around to save them. Alcohol taken after relapse will sometimes cause evacuation by vomiting, but no such reaction occurs with narcotics. Narcotic addicts fully absorb what they put in. Often at parties and "rave" groups, alcohol is combined with various drugs that are completely unidentified. Participants have no idea what they are taking.

Is Podiatry Contributing to This Epidemic? The Short Answer Is No. Here Are the Reasons:

- 1) DPMs constitute roughly 15,000 doctors, each of whom has access to a narcotics license—a tiny number when compared to allopathic physicians.
- 2) There are roughly 1.5 million practicing physicians in the US.^{9.5} Comparative numbers suggest that DPMs could not be supplying most of the dangerous prescriptions responsible for this catastrophe.
- 3) DPMs are closely monitored in a number of categories, for example, nursing home financial charges and attempts to obtain money by (deliberately) mis-identifying routine foot care. There is no reason to assume that pharmacy boards and others are not also watching DPMs, looking for prescribing outliers.

Of course DPM diversion, addiction, and over-prescribing happens, but an Internet research suggests that the number is (so far) comparatively small. DPMs don't generally see anywhere near the volume of patients that medical doctors treat. As a minority medical profession, it is safe

to say that we are in the spotlight of regulators and investigators, judging by nursing home and RFC billing convictions, which are far more common.

Some publications suggest that medical doctors do not get adequate training in addiction and chemical tolerance.^{2,6} If that is true, it is not a stretch to say that MDs get even less

has always been a part of podiatry. Our patients may lose their jobs if they can't stand and perform. They are under enormous stress. If they go to a medical doctor instead, are they more likely to get a prescription for narcotics?

While being examined and treated by a DPM, they will likely "end up" with biomechanical evaluation,

There is no reason to assume that pharmacy boards and others are not also watching DPMs, looking for prescribing outliers.

training on foot and ankle issues and nothing on biomechanics.

Functional vs. Chemical treatment: DPMs don't have to write dangerous prescriptions because we have treatment tools medical doctors do not have.

Historical Podiatry and Our "Separation" from Medicine: Protecting Our Patients

There are a thousand (political) reasons why DPMs should have an "unlimited" medical license like DOs and MDs. But our historical separation has yielded some interesting patient-protective characteristics we ourselves fail to acknowledge.

Podiatry has a "patient-centered, hands-on philosophy" of conservative treatment and "giving of comfort." We are at risk of losing this as we transition more into MD-type practice. If we do, our patients will be the losers for it. This started with humble RFC, or routine foot care. Our internal critics charge that this is just "technician work" and does not really "honor" the status of a physician. But that which separates us also protects our patients. We always wanted to be like medical doctors; but that is not always in our patients' best interest. Is podiatry with only limited outside influence creating a separate culture?

Separation from allopathy has led podiatry to be a leader in biomechanical evaluation and process. It started with humble arch-supports and progressed very much further. Function

orthotics, gait and shoe advice, physical therapy, NSAIDs, strapping and padding, injection therapy...that leads them to off-loading painful areas....all without powerful drugs.

Gateway Drugs

No discussion of the heroin epidemic is complete without discussing the part that physicians play in this catastrophe. Evidence suggests that MD physicians and surgeons turn to narcotic analgesic prescriptions for patients who do not really need them. (8) Much of this is done for the physician's "convenience."

A prescription pad allows a patient visit to end quickly with only rudimentary evaluation. This is a reflection of the past, when women and girls were often thought of as "hysterical" and childish by physicians. It was easier to just prescribe relaxants and drugs rather than delve into actually making a diagnosis.

Through the 1960s to '90s, pharmacologic "approaches" to diseases of women were primarily Premarin and Valium. The manufacturers of these drugs made billions. Missed were various cancers like uterine, fallopian tube and colon, which metastasized in the meantime.

We need to identify this history, even though it does not involve podiatry directly. According to CDC, MDs are now on a roll with narcotic analgesics for routine problems that don't require them and could likely lead to addiction.^{2.5}

Continued on page 79

Oxycontin (from page 78)

Oxycontin, the Gateway Drug?

A study done by Lauretta E. Grau, Ph.D. et al. in 20075 suggested that the primary factor in "stepping" to generalized addiction was "poly-opioid" use. This meant that even though Oxy was prescribed, the addict usually had a history of "stepping between various" opioids during early progress to full-fledged addiction. Maybe the patient is still in pain from a serious ankle injury that had been operated on by a medical doctor. The medical doctor cuts off the opioid drugs without addressing the cause of pain, and the patient turns to heroin, which is very much available on the street. Instead, a podiatrist might try physical therapy, gait-training, orthotics, off-loading, and full evaluation of any biomechanical problems contributing to pain. What started out as a seemingly "minor treatment" might turn into

Oxycontin and Podiatry

Podiatrists who practice bone surgery (now with a higher percentage of DPMs who practice surgical trauma-repair) have need to prescribe narcotic analgesics. In historical years of DPM practice, many DPMs stayed with elective forefoot procedures and were not involved with serious foot, ankle, and leg trauma. The advent of the three-year DPM residency changed that. Included in this transformation is an apparent "willingness" for orthopedic surgeons to turn over foot and ankle trauma to DPMs. There may be several reasons for this:

Foot and ankle surgery may not pay as high as knee, hip, and back operations. Also, the circulation in the ankle is frequently not as "robust" as in other anatomic areas, and this contributes to a higher incidence of post-operative complications. There is also a strong tendency for podiatric patients to "demand"

Biomechanical awareness and practice can lead to reduction of necessity for narcotic analgesics for podiatric patients.

the best thing that ever happened to this patient. Keeping patients on their feet also assists with weight management and avoidance of obesity.

If Oxy is more dangerous than ordinary narcotic analgesics, there may be several factors operating. But the unmistakable characteristic of Oxycontin is its very, very close molecular structure to pure heroin.

A key comment often seen in studies on opiate addiction is "drug-seeking" behavior. This seems to separate addicts from non-addicts. It also cannot be overstated that most addicts abuse multiple substances. The starting point is when the brain is conditioned chemically to accept and desire these chemicals. Is it better to do your best to avoid habituating meds in the first place? Not everything in nature is completely controllable. Sometimes the price of totally removing pain is too high, excepting terminal care.

an earlier return to work without allowing sufficient time to heal. Our difficult and competitive economy has contributed to increased time demands against our own patients. For the patient, a serious foot and ankle injury is serious bad luck!

It is well-documented that tobacco use almost doubles the time required to heal bone surgery. A 43% increase in healing time is not uncommon. Sometimes it is even greater. This higher degree and number of complications has not been an "attractive" aspect for orthopedic surgeons. Trauma cases do not allow for cease-smoking seminars. You can't pre-select your ER patient.

Biomechanical awareness and practice can lead to reduction of necessity for narcotic analgesics for podiatric patients, because even during pre-surgical evaluation, biomechanical consideration is part of surgical procedure choice.

Avoidance of Narcotic Analgesia for DPM Patients: Depression and Pain

Depression is very common during the chronic pain experience. Lower back-pain patients are probably at the greatest risk. But traumatized bone and joint weight-bearing anatomy is not far down the list.

Pain-specialists suggest that opioids themselves contribute to depression. This is certainly true of long-term use. Breaking the "pain-cycle" becomes a chief goal of pain management. The DPM can use local anesthetic injections, cortisone injections, re-balancing gait, physical therapy, and also tricyclic anti-depressants like Nortriptyline to help interrupt the pain cycle without increasing doses of narcotics.

I often used nortriptyline for patients who "asked" for more narcotics, explaining to them that pain also included depression, and that it often exacerbated the pain. It is reasonable to suggest that this will not work with drug-seeking patients. But the DPM can still make an "honest effort" to try to reduce and direct drug-seeking behavior to more constructive care. I refused to increase the narcotic dose, but instead prescribed Nortriptyline. This was within the DPM licensure because I was using "another" medication to treat foot pain. It was surprisingly effective.

Returning to Basic Podiatry

Post-operative management gives us an opportunity to return to basic podiatry and biomechanics. This is part of our shared podiatric history and experience. Orthotics are very much a part of this, as we have been providing this service through many years and generations of DPMs.

Other possibilities include ROM exercises, post-operative therapeutic nerve blocks, gait training, crutch training, and strapping and padding, which direct gait away from painful exacerbations. When a patient has a contra-lateral joint complaint, consider measuring for leg-length discrepancy. (This can be done with a metered-standing hip-film to compare the relative heights of the femoral

Continued on page 82

Oxycontin (from page 79)

heads.) Leg-length difference can be a powerful contributor to contra-lateral knee pain during DPM surgery recovery. Crutches also contribute to this problem.

Understanding the "Karpman Drama Triangle", Part-and-Parcel of Drug Seeking Behavior

Some patients show drug-seeking behaviors very early. We have all seen them and by now can easily recognize the signs. All narcotic-seeking patients are part of a psychological construct called The Karpman Drama Triangle (KDT). All treating physicians should be in a position to understand this concept. It is beyond the scope of this article to discuss it in detail. Narcotic-seeking patients are putting themselves into the KDT as victims.

The major point of the KDT is that a person who is "invested" inside it, tends to switch behavioral roles, from "victim" to "persecutor" to "rescuer." The switching of roles characterizes addiction and those who are in contact with addictive and addicted patients.

It is very easy for the treating podiatrist to get sucked into the KDT when working with narcotic-seeking patients. Here's the narrative: "You did the surgery. You made a mistake that caused me this pain. You must prescribe more narcotics. It's YOUR fault I need them." When you accede to these demands you are putting yourself in the KDT. This is not a good place to be. This is called "marrying your patient." Do you really want to be prescribing narcotics for your drug-seeking surgery patients for the rest of your career to try to avoid a malpractice suit?

Rather than just "cutting them off," part of avoidance of the KDT is referring this patient for group management by pain control specialists who, by definition, will NOT allow themselves to be sucked into the KDT.

Maybe you'll get sued. Maybe you'll lose some control over your patient. But you can avoid some of those pitfalls by developing good relationships with target providers who know your work and are much less likely to refer your patient to a lawyer. This means having those specialists, like friendly orthopods, pain control specialists, infection control doctors and

tures beyond their capacity: This is a common cause of post-operative foot and ankle surgery, which is directly attributed to structural abnormalities that your patients have. Knowing their foot and ankle foot type will allow you to use your biomechan-

All narcotic-seeking patients are part of a psychological construct called The Karpman Drama Triangle (KDT).

others who are available for difficult patients. Don't exclude fellow DPMs from this list! They too may have the experience and tools to help get your patient off the Karpman Drama Triangle, and their drugs. That DPM might be just down the block. He/she might not be a surgeon, but may have biomechanical knowledge that you don't have.

Classifications of Pain

There are different classifications of foot and ankle pain and in order to treat them properly, you have to assign them to the correct category:

- 1) Post-operative pain from surgical incisions and bone work. This pain is most effectively treated by immobilization, ice packs, and rest. Early ambulation causes increase in pain. Counseling patients on how to use non-narcotic medications can strikingly reduce the need for narcotics by keeping a steady blood level of non-narcotic analgesics. This classification also includes crepitus from fracture sites that are not yet treated.
- 2) Pain from ambulation or movement of bone that is healed sufficiently with bone callus: This classification will usually come with local edema and is aided by range of motion physical therapy without weight-bearing, with gradual return to walking over a period of time. This is often supervised by a talented physical therapist. Don't forget the possibility of migrating hardware and screws.
 - 3) Pain from stretching of struc-

ical knowledge to treat their pain. Equinus and pronation are chief contributors, but there are others. Scar tissue deposition also strikingly reduces range of motion and ability for tissues to "stretch."

- 4) Regional pain disorders and nerve pain: This is a completely different category and even though it can be amenable to biomechanical efforts, it usually requires consultation with other specialists and pain control physicians.
- 5) Pain caused by spinal N compression disorders, which are not typically related to chain-of-gait abnormalities, but originate in the spine and transmit distally by N tissue. Nerve conduction studies and referrals to neurologists can often assist you in making that diagnosis. Don't forget, the patient may also have a metastasized cancer tumor that is causing the pain.
- 6) Chronic pain syndromes: These occur when there is a long-standing disability and is most common for back pain patients. This is much less common in foot and ankle patients. But it can happen if structural tissues are biomechanically stressed beyond their ability to adjust to the extra-demand.
- 7) Intermittent claudication and lack of sufficient blood supply: This is an entirely different category and vascular surgery and stopping smoking is the best method of treatment. Narcotic analgesics can be toxic to these patients.
- 8) Severe arthritis and impact of bone against nerve tissue. This is a Continued on page 83

Oxycontin (from page 82)

condition that is better treated by arthritis specialists than DPMs, but many of these patients see improvements with orthotics. You need to be sure of the foot type before you prescribe the orthotics.

- 9) Pain with shoe and foot gear: All DPMs should have shoe stretchers and stretching fluid to hold the widened shoe shape. This is particularly useful in getting patients back to work comfortably much sooner after surgery, which they will definitely appreciate. Avoiding direct pressure on operated surfaces is the goal. Sometimes, you can also "operate" and cut open the toe area of the patients' footgear.
- 10) Compartment syndrome: Most DPM surgeons are aware of this condition, which is a podiatric

sion, much of which was developed when DPMs did not have drug and surgery licensure.

- 2) Be aware of the fact that there is a major narcotic epidemic going on right in front of your doorstep, which might very well also include a family member.
- 3) All significant injuries and accidents present a "risk" factor for narcotic addiction. Patients must be educated that narcotics will not always cure all of their pain. They may cause more problems than they help. There is simply no justification for a prescription for 160 Oxycontin after routine surgery!
- 4) Consider referring patients who show signs of depression. Many venues like Kaiser Foundation are now turning to tricyclic antidepressants to help manage back and joint pain, including post-operative and

proud of this and not lose it in our desire for parity.

7) In many states, physician assistants and nurse practitioners also write for narcotics. Some states allow it; others do not.

The heroin addiction epidemic demonstrates a new opportunity to see the value of treating human biomechanics in action, as practiced by 15,000 doctors of podiatric medicine. For DPMs, function trumps chemicals. **PM**

References

- ¹ Molecular structure of Heroin https://en.wikipedia.org/wiki/Heroin
- ² Molecular structure of Oxycontin http://www.rxlist.com/oxycontin-drug. htm
- 2.5 http://claad.org/rx-drug-abuse-stats/
- ^{2.6} http://www.hhnmag.com/articles/5259-stopping-dr-feelgood-the-challenge-of-overprescribing
- ³ Cost of heroin http://heroin.net/about/how-much-does-heroin-cost/
- ⁴ Cross-sensitization and Marijuana as a "gateway" drug http://www.drugabuse.gov/publications/marijuana/marijuana-gateway-drug
- ⁵ Lauretta Grau, Ph.D. https://www.researchgate.net/publication/6224673_ll-licit_Use_of_Opioids_Is_OxyContinR_a_Gateway_Drug
- ⁶ Timothy C. Kwiatkowski, MD http://www.footlogic.com/pdf/smoking-orthopedic-consequences.pdf
- ⁷ Long-term use of opioids and depression http://www.sciencedaily.com/releases/2013/10/131031124725.htm
- ⁸ Time Magazine: http://ideas.time. com/2012/11/26/viewpoint-prescriptiondrug-abuse-is-fueled-by-doctors/
- ⁹ http://www.casacolumbia.org/addiction/disease-model-addiction
- 9.5 http://answers.google.com/answers/threadview/id/592995.html
- http://www.drugs.com/news/more-americans-seek-painkiller-hero-in-abuse-59270.html
- 11 http://www.foothelpers.com/

There are different classifications of foot and ankle pain and in order to treat them properly, you have to assign them to the correct category.

surgical emergency that must be addressed. It can occur with serious injury to the lower leg, say, from an auto accident, but can also occur with direct swelling, say, after a marathon run.

11) Pain from infection and swelling: Be sure to take the patient's body temperature as well. Infections and swelling under a cast are particularly heinous. You need to remove the cast and examine the operative site.

The above categories constitute at least 90% of pain in the foot and ankle. Sometimes the classifications overlap. This is particularly true when poor circulation is in the picture. Charting these classifications will go a long way to preventing and ably defending lawsuits against you.

Summary

1) Return and be proud of the historical significance of your profes-

chronic pain. Amitriptyline is not addictive, but forms a very gradual "additive effect" which requires weaning-off if the patient is on the drug in higher doses or is on the medication for a long time. Most DPMs would not typically use a higher dose. You would use the lowest dose possible. Alcohol contributes to depression in all chronic pain syndromes.

- 5) As a DPM, you have tools that a local orthopedist and medical doctor do not have in treating post-operative and non-operative foot and ankle pain. They might just prescribe more Oxycontin. You can do so much more.
- 6) Recognize the value of the DPM/MD schism. Our separate development and history has not always led to disadvantage. In the case of politics, it is easy to argue that we are at a disadvantage. But in terms of foot and ankle patient-care, we have much more to offer. We should be



Dr. Rosenblatt is now retired from podiatry and lives in San Jose, CA. He owned a Medicare-Certified Surgical Center in Washington State. He has been a frequent contributor to Podiatry Management Magazine.