

Center for Pain Medicine & Physiatric Rehabilitation

A Whole-Body Approach to Pain

Diagnosis is a large part of the practice of psychiatry, and a good history and physical exam are crucial to the diagnosis. Brian Kahan, D.O., a physiatrist and medical director of the Center for Pain Medicine & Physiatric Rehabilitation, relates this example: A gentleman complaining of right-sided pain was found on MRI to have a herniated disc. After surgical intervention to remove the disc, his pain was still there, exactly as it had been before surgery. Thinking he needed help with his “post surgery pain,” the surgeon referred him to the Center for Pain Medicine & Physiatric Rehabilitation. “At first glance, it was easy to attribute his condition to normal postoperative pain,” Dr. Kahan says, “but in this case, the pain pattern didn’t fit. What would produce pain on the right side?”

Upon questioning the patient further, Dr. Kahan learned that the gentleman also experienced headaches, numbness and tingling along with the right-sided pain. “The only way to get that kind of pain is to have something wrong in the brain,”

Dr. Kahan says. “We began to think in terms of a disease such as multiple sclerosis and the whole picture changed. There had been, in fact, a herniated disc in this patient’s back, but it was not the cause of his pain. This is why we, as physiatrists, take more of a whole-body approach to pain. If we focus on a single organ system, we may miss the diagnosis completely.” Physiatrists work in various subspecialties from traumatic brain injury to pediatrics. Two of these — pain subspecialists and musculoskeletal subspecialists — are experts in how the body works with respect to muscles, nerves and joints. “Although we can’t put things back together if they’re broken, we understand how things work,” Dr. Kahan says. “We use a finely tuned process that includes examination, exercises and spinal injections to appropriately diagnose and help treat the impairment. And we ask a lot of questions.” Orthopedic surgeons often rely on physiatrists to confirm a diagnosis and to exhaust every nonsurgical means of intervention.

“If a patient does not respond to conservative treatment within six to 12 weeks, we usually know where the problem is coming from and we begin to consider surgery,” Dr. Kahan says.



The staff of the Center for Pain Medicine & Physiatric Rehabilitation, pictured from left to right (back row): Stacy Harris, M.D.; Brian Kahan, D.O.; Richard Genato, M.D.; (front row) Nancy Doong, P.A.; Maureen Ploen, P.A.; Seth Kaufman, D.O.

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Believe the Patient

Dr. Kahan recently discovered some interesting statistics about pain sufferers in the state of Maryland. Sixty-six percent of Maryland households have someone who suffers pain on a monthly basis and 45% of Maryland households have someone who suffers pain on a daily basis. Seventy-eight percent were never referred to a pain specialist and 65% were not aware that there is such a thing as a pain specialist. Many had been told by their doctors that pain is part of growing old.

“I believe that you have to listen to your patients and believe your patients,” Dr. Kahan says. “Understand that not everybody getting older is supposed to be in pain. A pain sufferer should be assessed just like a person with high blood pressure or any other medical condition.”

Dr. Brian Kahan and his staff now see patients in his newest center at the AAMC Medical Center Building in Chester, MD.



Treat the Cause (Not the Symptom)

Sometimes, the cause is obvious: “I hurt my back while chopping wood.” However, when there is no history of injury or overuse and the patient has had the pain for five years, it’s appropriate to resist the knee-jerk reaction to prescribe a pain medication and, instead, spend time trying to figure out why the patient is hurting. “I tell my patients to bear with me and we will work quickly to find out why they are hurting,” Dr. Kahan says. “That way, when I prescribe a medication, it will be the correct medication. By the time they get to me, they have tried so many things, they say, ‘OK.’”

The intense assessment will sometimes find the cause of the pain. “When we find it, there may be possibility we can fix it, but maybe the technology or the pharmacology has not caught up with us yet, so all

we can do is manage it until, hopefully, something better comes along,” Dr. Kahan says.

Referral to a pain specialist sooner rather than later is extremely helpful. Many patients are programmed to believe that if they take a certain pain medication, it will help. When it doesn’t help, they continue to take it anyway. “The medication may not be appropriate for their particular type of pain,” Dr. Kahan explains. “I tell them to stop it and they refuse because they were told to take it. Often, we have to retrain them. Standard medication for a sprain or a broken bone, for example, will not work for nerve pain. Furthermore, pain medications do come with the side effect of dependency.”

Re-Educate the Muscles

Nonoperative treatment is always the goal of physiatry. A good example is the pain associated with a herniated disc that often comes from a significant chemical reaction. “If you can control the production of inflammatory enzymes where the disc is herniated, then you can reduce the patient’s pain and the disc can heal naturally,” Dr. Kahan says.

The production of these enzymes is triggered when the herniated disc comes out of its space and is part of an inflammatory cascade. The first line of treatment is the use of anti-inflammatory medication, followed when necessary by oral or injected steroids. X-ray images are used to guide the injection of cortisone around the disc to decrease or stop the inflammatory cascade.

Once the pain is under control, the question remains as to why the disc became herniated in the first place. In many cases, it has to do with poor core stabilization, the result of too sedentary a lifestyle. Even when the patient is successfully treated for pain, he or she still lacks the support needed to take pressure off the disc. If the patient fails conservative therapy and has surgery, the same problem remains. Unlike a broken bone that when fixed stays fixed, a herniated disc usually occurs because of some imbalance between the musculature or unbalanced forces being placed on the spine. If that imbalance is not corrected, the herniated disc will recur.

“At this point, we try to get the patient into a lumbar or cervical stabilization program to strengthen supporting structures around that disc so that when the offending problem goes away, it doesn’t recur,” says Dr. Kahan. “When we are not 100% successful in preventing surgery, we stay with those surgical patients and take them through physical therapy



Dr. Brian Kahan utilizes advanced medical techniques to determine the source of a patient's pain.

because they, too, need to re-educate their muscles to support and strengthen the back and neck. I tell all my patients that have back problems, whether they have done well without surgery or had surgery, once they start the muscle re-education process, it becomes like brushing teeth. They will have to do some back or neck exercises every day or they risk having the same problem all over again. Patients who take more responsibility with exercise and understand its role in their overall health can prevent a lot of the reasons why people come to see me.”

Block the Channels

Exciting research is going on with regard to why we have pain today. Forty or 50 years ago, it was thought that chronic pain occurred as a result of injury or a nerve disorder. At that time, the only medications used to treat pain were narcotics, analgesics or anesthetics. “We thought there were only two channels —either mu receptors or sodium potassium channels,” Dr. Kahan says. “So, therefore, the only two things we knew would affect those were opioids, which block mu receptors to decrease pain, or lidocaine, which would block sodium potassium channels to also decrease pain. However, even with the use of those drugs, people still had pain. Now, we know there are over 40 different chemicals that are released in the body that can cause chronic pain, even if there is no obvious evidence of trauma. And that’s

what is so exciting about pain medicine these days. None of those chemicals responds to opioids or lidocaine. They respond to glutamate-blocking agents, NMDA antagonists, as well as drugs called GABAergic enhancing agents and voltage gated calcium channel modulators.”

Dr. Kahan predicts that the use of narcotic or opioid medications for the treatment of chronic pain will soon be a thing of the past. “Opioids are appropriate for acute pain, such as a broken bone,” he says. “But ultimately, we will have much better drugs for sufferers of chronic pain, from diabetic peripheral neuropathy to postherpetic neuralgia due to shingles and even to spinal cord injuries and phantom limb pain.” For now, the ability to block the pain-causing chemicals is limited to the laboratory setting; the availability of an effective drug may be five to 10 years away. “Some medications have already been produced to help with this,” Dr. Kahan says. “Duloxetine, pregabalin and gabapentin are FDA approved and yielding good results. That said, we have a long way to go, but I think there is a lot of hope.”