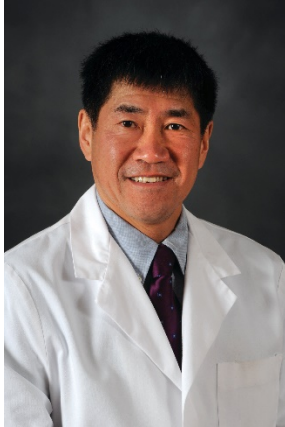


## Innovations in Arthritis Treatment Credited to Whole Body Donation



Dr. Nathan Wei, an interventional rheumatologist based in Frederick, Maryland, is pioneering some groundbreaking new treatments for arthritis, and he believes none of this would be possible without the use of whole body donations to learn and refine his skills.

Dr. Wei points out, “Generally, rheumatologists don’t do arthroscopy.” Typical arthritis treatment involves the use of pills, injections, and exercises. However, under the tutelage of Dr. Lanny Johnson, an orthopedic surgeon in East Lansing, Michigan, Dr. Wei acquired the knowledge to perform arthroscopic procedures.

Dr. Wei then took his newfound skills back to the cadaver lab at the University of Maryland. “The value of having cadavers just can’t be underestimated when you are learning new procedures”, he emphatically states.

Dr. Wei practiced these techniques on the cadavers. He studied videos of Dr. Johnson’s surgeries and replicated his methods on the donor bodies. As a result, he was able hone his skills, eventually becoming the only rheumatologist member of the Arthroscopy Association of North America.

Dr. Wei also credits his specific expertise with ultrasound guided procedures to his time in the cadaver lab. He believes this was instrumental in learning how to precisely define the anatomy which is necessary to carry out these types of procedures.

Now by putting these skills into practice at the Arthritis Treatment Center, one of the top 10 private arthritis treatment centers in the U.S., Dr. Wei is able to use cutting edge therapies to help his patients fight the battle against osteoarthritis. One of his most promising treatments to help regenerate cartilage in joints is called the Guided Missile procedure. Using ultrasound guidance, stem cells from bone marrow are harvested from the patient’s posterior iliac crest with pinpoint accuracy. This is combined into a “cocktail” with the patient’s own platelet rich plasma and fat tissue. Then, arthroscopy is performed on the joint to inject the cells into the damaged area. Results have shown there to be new cartilage growth and a reduction in pain. He has seen an 80% success rate for knees, which has allowed patients to avoid knee replacement.

Dr. Wei also treats Carpal Tunnel Syndrome. Carpal Tunnel is a medical condition in which the median nerve is compressed as it travels through the wrist. This can lead to the sensation of numbness, tingling, and weakness within the affected hand. In the past, treatment has generally consisted of splints, anti-inflammatories, and corticosteroids. When these methods have been unsuccessful, surgery is usually the next step, often resulting in weeks of recovery.

This is not the case with Dr. Wei’s treatment. He uses a specially designed needle and thread guided by ultrasound to cut through a fibrous band in the wrist which relieves compression on the nerve. This is

done quickly and using only local anesthesia. His patients experience virtually no downtime following the procedure.

Mrs. Joann Hillary of Union Bridge, Maryland, was one of the lucky recipients to be treated with this method. According to Mrs. Hillary, arthritis “loves” her. When she began having problems with her wrists, she tried the traditional methods of treatment, including wearing a brace and applying topical ointments, but only found short-term relief.

Mrs. Hillary says she appreciates how Dr. Wei “keeps up with the latest procedures to benefit his patients”, so she opted to try the new thread and needle procedure. She states, “It’s been wonderful. The procedure didn’t take long, and the next day I was using my hand like nothing had been done.” Her discomfort quickly diminished and, most importantly, has not returned. Now this soon-to-be-grandmother is looking forward to having the same procedure done on her other wrist as soon as she can.

The treatments offered by Dr. Wei are a great example of where the future of medicine is heading- less invasive procedures with greater outcomes. However, Dr. Wei is quick to recognize that the selfless gift of whole body donation is what makes these advances possible. He states, “The one thing I want to emphasize is that those of us that have used cadavers to learn our skills are extremely grateful to those that have donated. I just don’t have enough words to express my gratitude for that.”

Article written by Erin Azuse, RN BSN