

Introduction

Jarrah Ali Al-Tubaikh, MD – specializes in radiological diagnostics of rare disorders. He is a member of the German Board of Radiology and currently works in the Radiology Department, Amiri Hospital, Kuwait City, Kuwait. Kuwait offers a sophisticated healthcare system to its residents, with highly trained specialists. Despite best medical practices and state-of-the-art interventions by physicians, many of these patients continue to suffer from excruciating pain. Since Dr. Al-Tubaikh was introduced to the Tennant Biomodulator® medical device and protocols of Jerry Tennant, MD, MD(H), PScD, of Colleyville, Texas, Dr. Al-Tubaikh has significantly improved or eliminated ongoing pain in these patients.

Background

As a radiologist, Dr. Al-Tubaikh assesses many patients who are referred to him to determine if the source of their pain can be identified by X-ray or MRI. Before specializing in radiology, Dr. Al-Tubaikh worked as a medical physician and a surgeon, which helped him later in examining radiological images through the eyes of a clinician rather than just a radiologist. A certain subset of those patients has been described to Dr. Al-Tubaikh as “hopeless” cases where physicians have run out of treatment options available through the healthcare system. Since learning of the Tennant Biomodulator® microcurrent device for drug free, non-invasive pain relief, Dr. Al-Tubaikh has used it with patients and co-workers at his hospital on some cases as trials, as well as with friends, all of whom suffer with severe unresolved pain symptoms. In two cases, he used the Biomodulator with patients specifically referred to him from some clinicians because of severe back pain, as word of the “miracle” treatment spread. In each case, Dr. Tubaikh said he takes images before and after treatment to document changes that have occurred from Biomodulator treatment. “It is hard to argue against radiological images because the evidence is clear; it is not placebo anymore.”

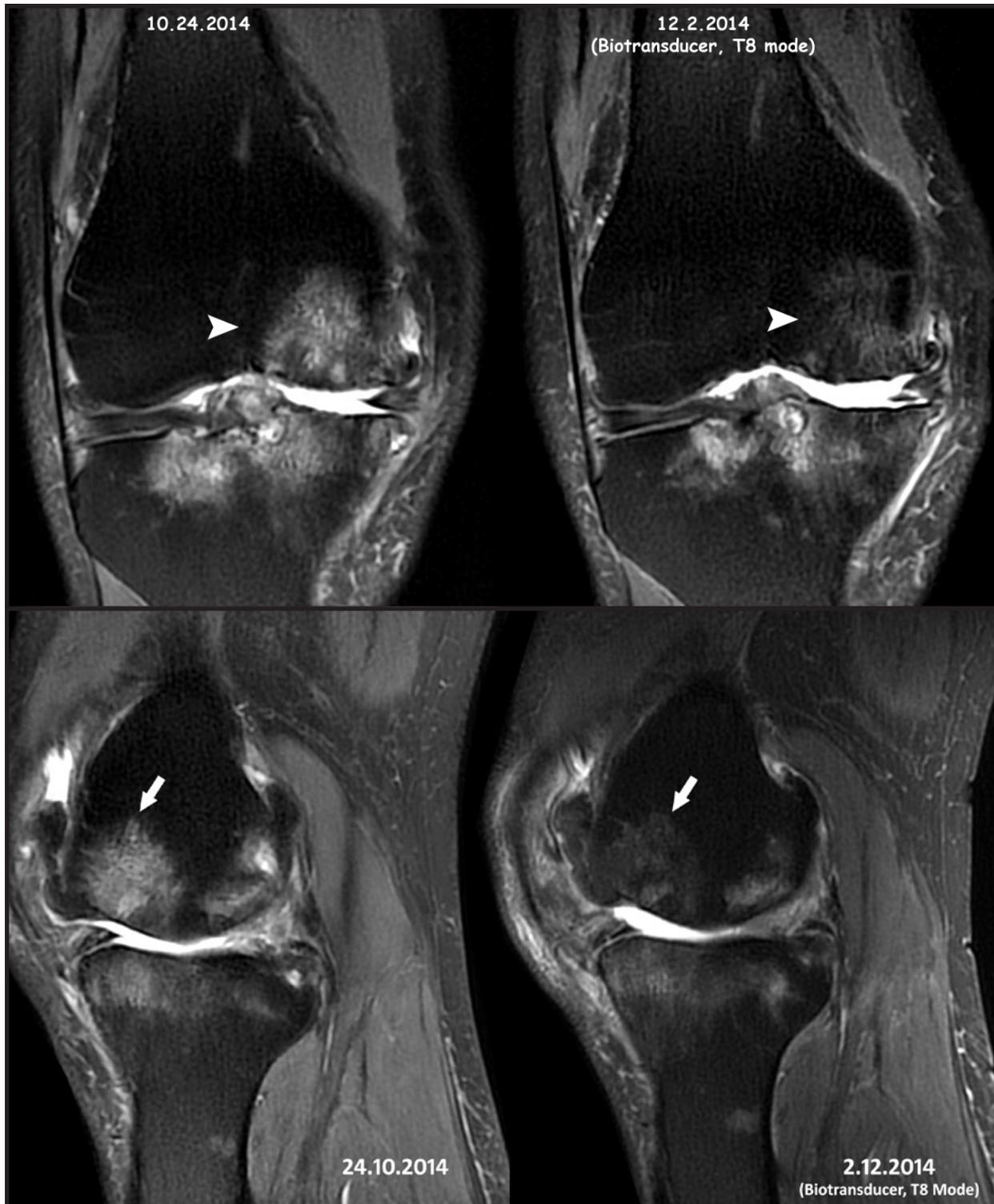
Necrotic Knee

A 71-year-old diabetic, hepatitis-C positive patient presented with a history of right knee osteoarthritis resulting from a fracture that had occurred approximately 20 years ago. On October 24, 2014, the patient limped into the radiology department. The initial MRI images showed severe osteoarthritis, complete cartilage loss in the medial femoral condyle (the lower end of the thigh bone at the knee), osteoarthritic changes, and marked edema (swelling) in the medial femoral condyle, suspiciously like Ahlback’s disease. Ahlback’s disease is the result of vascular arterial insufficiency to the medial femoral condyle of the knee resulting in necrosis (death) and destruction of bone.¹ Traditional treatments for Ahlback’s disease are bisphosphonates, a group of drugs that are used in the treatment of osteoporosis and bone malignancies, and/or surgery.² Additionally, chronic infections with hepatitis C virus add to age-dependent bone loss and may contribute to lower bone strength in the elderly.³

After discussing therapeutic options with the patient, which, in this case, were restricted due to advanced age and deteriorated health, the option of pulsed electromagnetic frequency therapy using Tennant’s Biomodulator with the biotransducer attachment was suggested. Beginning on November 3,

2014, the patient was treated daily for 30 to 45 minutes for one month.

During the period of therapy, the patient reported reduction in pain and swelling of the knee and improved ability to walk normally. An MRI scan was repeated in December 2, 2014, to document any differences in the MRI image (See images below).



The MRI images showed almost 90% resolution of the medial femoral condyle edema and the normal bone marrow signal returned to almost 90% normal. The lack of significant changes in the tibia is simply because the position of the biotransducer probe was concentrated for the treatment period over the medial femoral condyle region, mainly, the focus of pain.

Unconventional therapies, such as electromagnetic frequency therapy, are often maligned and disregarded. However, for a population that is often difficult to treat because of advanced age and comorbid conditions, such as diabetes and hepatitis C, medical professionals should not be so quick to judge. Pharmaceuticals often have many adverse side effects and for persons whose health is already compromised, pharmaceutical intervention may not even be an option. The next option is surgery, also contraindicated in such a population.

Electromagnetic frequency therapy is safe and non-invasive. In keeping with *first do no harm*, prescribing pharmaceuticals, performing surgery, or doing nothing could be harmful. Using this novel, non-invasive therapy to treat the patient possibly saved his leg. Dr. Al-Tubaikh's perseverance and unconventional approach has helped many patients in similar circumstances.

Tennant Biomodulator® Technology

The Tennant Biomodulator® device uses specific, patented microcurrent technology to encourage the body to use its own resources to produce a healing outcome. Microcurrent has been shown repeatedly to reduce pain and improve a variety of health conditions.^{4,5,6,7}

While basic microcurrent technology has been around for more than 40 years, the Tennant Biomodulator® device uses a proprietary set of frequency patterns developed by Jerry Tennant, MD. These patterns or “modes” are delivered by patented microchips to produce very specific outcomes. These hand-held devices are FDA-cleared for the symptomatic relief and management of chronic, intractable pain and adjunctive treatment in the management of post-surgical and post-traumatic pain. The Tennant Biomodulator® uses different neural paths and a different wave form than a traditional TENS device. Rather than just masking pain, the Biomodulator targets C-fibers of the nervous system (most TENS devices work on the A- and B-fibers). C-fibers stimulate the production of neuropeptides and other regulatory peptides, which the body uses to heal itself.⁸

The Tennant Biomodulator® device produces unique, pulsed high-voltage, biphasic damped sinusoidal microcurrent electro-stimulation designed with Dr. Tennant's frequency modes. These patented medical devices are manufactured in the USA by Avazzia, a Dallas-based company, exclusively for Senergy Medical Group, are US FDA cleared, have Health Canada clearance and have earned the European CE mark.

Conclusion

The value of the Biomodulator device as another tool in a physician's tool kit is apparent. It is especially valuable for physicians, chiropractors, physical and occupational therapists, and others who regularly encounter “difficult” or “impossible” cases where pain is a significant factor.

Dr. Jarrah Ali Al-Tubaikh is an internist, surgeon and well-regarded radiologist, trained in Germany (LMU Klinikum Grosshadern, Munich), now working at a Kuwaiti-government (Al-Amiri) hospital. He has several publications to his credit, including the texts *Congenital Diseases and Syndromes: An Illustrated*

Radiological Guide (Springer; 2009), and *Internal Medicine: An Illustrated Radiological Guide* (Springer; 2017, 2nd Edition).

Dr. Jerry Tennant has authored several books including *Healing is Voltage: The Handbook* (2013, 3rd edition) and *Healing is Voltage: Healing Eye Diseases* (2011), *Healing is Voltage: Acupuncture Muscle Batteries: An Atlas* (2014), and *Healing is Voltage: Cancer's On/Off Switches: Polarity: An Atlas* (2015). Dr. Tennant also teaches courses, presents at medical conferences, and continues to see patients at the Tennant Institute for Integrative Medicine. Interviews can be seen on *Healing Quest* news magazine televised on PBS.

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