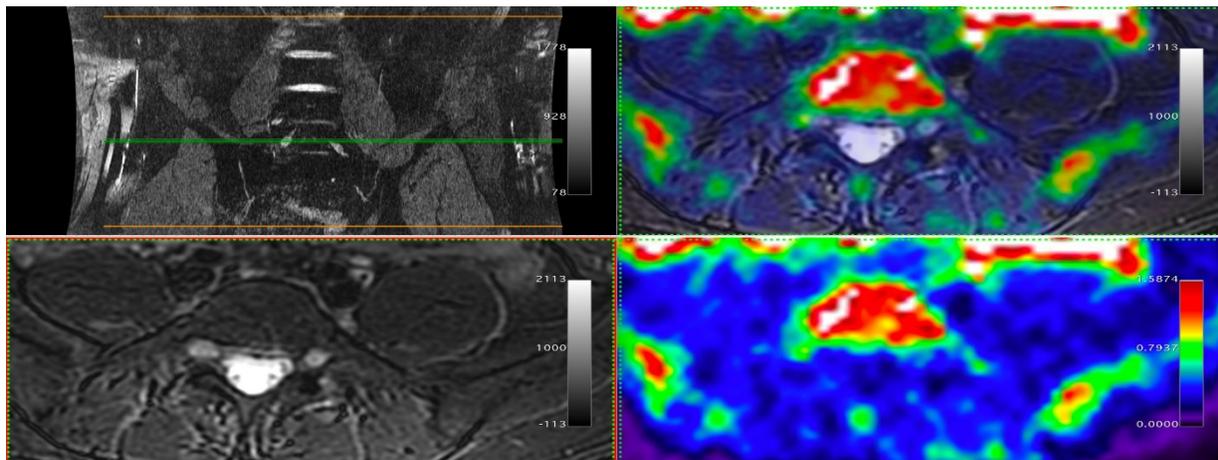


Discovering Novel Techniques for Localizing Nerve Pain

Thomas J. Wilson, MD | Co-Director, Center for Peripheral Nerve Surgery



Nerve pain typically presents as an electric or burning pain that can be severe and debilitating. This type of pain is often difficult to localize and can come from a variety of sources, including nerve injuries, entrapped nerves, and nerve tumors. For patients with multiple nerve tumors, such as occurs in neurofibromatosis type 1 and 2 and schwannomatosis, this can be even more difficult, as many times differentiating the one pain-generating tumor from the remainder of the tumors is difficult. Because of the difficulty localizing nerve pain generators, targeted treatment is often not possible. We are currently limited to the history and physical examination combined with conventional imaging modalities in our armamentarium for localizing nerve pain. With improved localization, more targeted treatment and better outcomes could be achieved. There is currently a desperate need for both novel techniques for localizing nerve pain and novel treatments for nerve pain, especially treatments that minimize narcotic use.

At the Center for Peripheral Nerve Surgery, we are working to develop new strategies to localize and treat nerve pain. Current routes of investigation include imaging using positron emission tomography (PET) and novel radiotracers for localizing pain generators and comparative genetic and protein expression profiling of painful and non-painful tumors. We have an active clinical trial evaluating PET imaging and a specific novel radiotracer, [18F]-FTC-146, to assess the expression of sigma-1 receptors, thought to be upregulated in chronic pain (ClinicalTrials.gov; NCT03556137).

If you are interested in discussing this research further, Thomas J. Wilson, MD, Co-Director of the Center for Peripheral Nerve Surgery, would be happy to discuss our findings, the future directions, and the needs for these projects. You can call (650)723-0320 or email wilsontj@stanford.edu.

SUPPORT THIS WORK

Philanthropic support would allow an acceleration of this groundbreaking research seeking to improve the lives of those with nerve pain.

For information on how to make a gift to the Center for Peripheral Nerve Surgery, please contact Allie Gregorian, Senior Associate Director of Development, by phone (650)724-9910 or email, allie.gregorian@stanford.edu.

