NAPA MEDICAL
RESEARCH FOUNDATION

Advancing research and discovering new treatments to improve movement and function

Cervical Facet Injection Study Findings

For people suffering from chronic neck pain and experiencing restricted range of motion, nearly 50% are diagnosed with osteoarthritis of the cervical facet joint. This condition can occur as a result of trauma or disc degeneration between the base of the skull and the lower neck.

Current treatments include corticosteroid injections to minimize inflammation in the joint and if not successful, then radiofrequency ablation of the nerve endings that communicate pain from the joint to the brain. Recently developed alternatives include the delivery of biologic agents, such as platelet-rich plasma or bone marrow aspirate concentrate containing stem cells into the joint to promote healing of tears in the joint capsule or cartilage.

To reach these small structures, located deep within a sensitive area of the neck, it has been the current practice of care to use fluoroscopic or CT guidance (both of which use x-rays) to position the needle and deliver the injection. Current methods have some of the following disadvantages:

1) Exposure to potentially harmful radiation
2) High likelihood of the needle contacting bone surrounding the joint, increasing pain during the procedure.
3) Accuracy rate with fluoroscopy has not been assessed but is estimated at 60-80%.
4) Required use of an injectable radiographic contrast agent to ensure needle placement has the following limitations:
    - Reduction of space available for injection of therapeutic agent to follow
    - Possible neutralization of the effect of cells and other biologic agents
    - Increased risk for allergic reaction.

Working with both fluoroscopy and ultrasonography for the last 17 years, Dr. Marko Bodor has developed a more accurate and less invasive technique with some unique advantages. This method of treatment provides for the delivery of a full dose of biologic agent directly into and around the joint space. With support from the NMRF, Dr. Bodor was able to determine that his new technique has a 92% accuracy rate, the highest ever reported for cervical facet injections.

The data comprises 60 cervical facet joints from 40 individuals treated with his technique and has been shared and analyzed by Dr. Naveen Murthy, consultant in radiology from the Mayo Clinic in Rochester, MN. The findings are being prepared for publication.

Dr. Bodor will share this leading-edge treatment with the broad medical community to ensure all patients suffering from osteoarthritis of the cervical facet joint have access to the most effective, least costly, least invasive treatment possible. Better yet, the procedure can be done with the smallest possible needles with minimal discomfort to the patient!