Sclerotherapy (ACOPMS). With regard to training, almost all (98%) of respondents held MD or DO degrees, and many (83%) were board certified in related disciplines such as physical medicine and pain management. Respondents were well-experienced clinicians with a median of 21 years in practice and 10 years administering prolotherapy for back and neck pain. They had provided a median of 2000 prolotherapy treatments to 500 patients with the most common region treated being the lumbar spine. Side effects such as temporary post injection pain, stiffness, and bruising were common. Adverse events such as spinal headache, pneumothorax, temporary systemic reactions and nerve damage were similar to those associated with other commonly used spinal injection treatments. From a total of approximately 340,000 treatments, a total of 69 adverse events required hospitalization (pnuemothorax - 48/69) and 5 resulted in permanent injury all secondary to nerve damage.[22]

Physiotherapists who are trained as manual therapists (FCAMT) provide a comprehensive system of diagnosis and treatment of neuro-musculoskeletal disorders involving specific skills, including assessment, mobilization, manipulation and education in conjunction with exercise to restore optimal motion, function and/or pain reduce pain. Patients who present with hypermobility of a joint or other enthesopathy may be appropriate candidates for RIT (prolotherapy). When used together, it is the author's opinion these two therapies provide the patient with a superior outcome. The key is proper selection of the patient and coordinated treatment with the patient's therapist. The patient can be assessed and/or treated before prolotherapy begins and as treatment proceeds and stability/strength is achieved, the therapist will note the patient will be able to make gains not otherwise possible. For most patients this will involve a treatment period of 6 to18 months.

**Neural Therapy**

People experience chronic pain for a variety of reasons. Pain can be entirely of nerve origin or nerve pain can be a component of the pain presentation.

Neural Therapy is a healing technique developed in Germany that involves the injection of local anesthetics into autonomic ganglia, peripheral nerves, scars, glands, acupuncture points, trigger points and other tissues. Neural Therapy is based on the theory that trauma can produce long-standing disturbances in the electrochemical function of tissues. A correctly applied Neural Therapy injection can instantly and lastingly resolve chronic long-standing illness and chronic pain. Neural Therapy is still unfamiliar to many practitioners in the United States and Canada. In Europe, it has become one of the most widely used modalities in the treatment of chronic pain.

The field of Neural Therapy began with the use of local anesthetics.[23] In 1883, the Russian physiologist Pavlov laid the foundation of the teaching of "nervosism". He recognized the coordinating influence of the nervous system upon all organic functions. In the same year the father of modern psychology, Sigmund Freud, discovered the local anesthetic effect of cocaine on mucous membranes. His colleague, Koller, was the first to perform eye surgery using a cocaine solution for surgery using infiltration anesthesia with a 0.2% cocaine solution. In 1903 Cathelin in France performed the first epidural anesthesia using a cocaine solution.[24] In the search for a local anesthetic solution that does not have the addictive and euphoric side effects of cocaine, Einhorn discovered Novocaine (procaine) in 1905. In 1906 Spiess discovered that wounds' inflammatory processes subside faster and with fewer complications after injection with novocaine. Leriche performed the first stellate ganglion block in 1925 for the treatment of chronic intractable arm pain.[25]

That same year (1925), the German physicians Ferdinand and Walter Huneke discovered incidentally that the intravenous injection of Novocaine could often lastingly abolish migraine headaches. The Neural Therapy diagnostic and therapeutic techniques have aside from physical therapy modalities become the most widely used system of pain control in Europe, Russia and South America. An estimated 35% of all German physicians use Neural Therapy to some extent.[27]

The clinical experience of practicing neural therapy leads to a profound respect for the importance of the autonomic nervous system in regulating body processes. In fact, the term regulation therapy has been proposed as an alternative to neural therapy.[28] Neurophysiology of the autonomic nervous system has always been the neglected stepchild of neurology. Part of the reason for this attitude has been the lack of tools to identify and treat local dysfunction. Neural therapy is one tool that allows these problems to be detected, treated and overcome.

The founder of Neural Therapy, Ferdinand Huneke, M.D., believed one of its beneficial effects was the elimination of interference fields. According to Huneke, an interference field is any pathologically damaged tissue, which on account of an excessively strong or long-standing stimulus or of a summation of stimuli that cannot be abated, is in a state of un-physiological permanent excitation. Any time a tissue is injured it can continually excite the autonomic nervous system. These centers of irritation through the autonomic nervous system may cause disease in other parts of the body. The nervous system theory, fascial continuity theory, ground system theory and lymphatic system theories have all been used to explain this phenomenon.[29]

Over the past 10 years, the complexity of cases of chronic pain that I see in my practice has continued to increase. More and more patients have chronic pain complicated by illness, depression, fatigue and polypharmacy. Although controversial and considered complementary, the uses of regenerative injection therapy and neural therapy used in conjunction with manual or-