Diabetic Peripheral Neuropathy Pain Treatment

In the United States the prevalence of overweight and obesity dramatically increasing the incidence of diabetes. According to WHO in the year of 2010 it would be 220 million people with diabetes worldwide. This statistics demonstrate the necessity of physician education not only in the treatment of diabetes but also in the managing of diabetes complications. Nearly a quarter of diabetes patient is already suffering from diabetic peripheral neuropathy and up to 50% of all diabetics develop peripheral neuropathy after 25 years of having this disease. Patients with diabetic peripheral neuropathy often presenting with pain that characterize as burning, aching, tingling, cold, allodynia and/or numbness.

There are numerous therapeutic agents are available but there is no single therapeutic agent available that is without adverse side effect and it is completely effective for the general diabetic population. Tricyclic antidepressants such as amitriptyline, imipramine, desipramine, and nortriptyline are useful in treatment of diabetic neuropathy. Pregabaline, gabapentin, tramadol and many others also are available for the treatment of diabetic peripheral neuropathy. When the right agent is determined, it does not necessarily relieve the pain in 100%. The physician must manage the patient on multiple levels using all available modalities in multi-functional strategy to alleviate initial pain and manage progression to other complications.

Percutaneous minimum invasive pain management technique is part of continuous strategy of permanent pain treatment that is widely use in nova days implanting the leads into epidural space and connecting them to subcutaneously positioned of spinal cord stimulator. Spinal cord stimulation applies electrical current in the form of short bursts or pulses to a specific area of the spinal cord. The pain control is very satisfactory in peripheral diabetic neuropathy patient population. Spinal Cord Stimulation has been used for many patients with failed back surgery syndrome after laminectomy as an alternative to re-operation. It has also been used to treat Complex Regional Pain Syndrome (former Reflex Sympathetic Dystrophy), post herpetic neuralgia, spinal cord injury and many others.

Traditionally, Neurostimulation was reserved as a late modality in the pain treatment continuum. In nova days, Spinal Cord Stimulation treatment implementing in pain treatment in earlier stage can enhance multidisciplinary care by facilitating participation in activities, such as physical therapy, which is essential for rehabilitation.