

## **Dedicated to Your Health!**

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**Head to Toe** 

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Winter 2012/2013 Highlights

- > PRP Fascial Rejuvenation
- > Vision Loss Aided by Digital Tablets
- > Small Fiber Peripheral Neuropathy

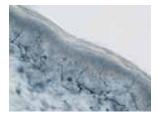


### **Small Fiber Peripheral Neuropathy**

Peripheral nerves in a general sense, can be subdivided into large and small nerve fibers. Typically, small nerve fibers are affected before large nerve fibers. Small fiber neuropathy, aka: small fiber sensory neuropathy (SFSN) or C fiber neuropathy is a newer focus of neuropathy that offers an earlier detection of neuropathy. Small nerve fibers are the nerve fibers near the skin's surface, which is why the symptoms deal with sensation. Usually the symptoms start in the feet and lower legs. The symptoms may include insensitivity to heat and/ or cold, tingling, numbness, muscle weakness, cramps, pain, and other symptoms. Some people describe the pain as an electric shock, or walking on broken pieces of glass, or bags of ice on their feet. Sometimes people experience a loss in the ability to feel and do not even know it.

This disorder can be caused by diabetes, alcoholism, or other conditions, but many times it is idiopathic. Identifying that you have small fiber neuopathy is the first step. Identifying potential causes is the next step, as therapy often consists of treating the underlying cause, as well as relieving symptoms.

Epidermal Nerve Fiber Density Testing (ENFD) involves taking a small "punch" of skin from the calf to visually count the number of nerve fibers. This allows a physician to identify small fiber peripheral neuropathy. Additionally, it also establishes an objective baseline so a physician can determine if treatments are effective. ENFD is a very sensitive measure of neuropathy severity. *Diabetes Care* 29:1294-1299, 2006



Normal Epidermal Nerve Fiber Density Test.



Abnormal ENFD test – loss of epidermal nerve fibers.

While there may not be a panacea for the cure of peripheral neuropathy at this time, there are several treatments that have a scientific basis and may substantially improve symptoms. The treatments go far beyond taking narcotics, anti-seizure, or anti-depressant medications.

#### **PRP Facial Rejuvenation**

The PRP facial rejuvenation treatment is ideal for individuals looking for gradual but noticeable improvement in skin texture, tone, and color with minimal recovery time. Often dubbed the "natural face lift", the procedure helps to restore your skin's natural beauty, and reduce the appearance of fine wrinkles. Taking advantage of your body's natural fountain of youth, platelets and growth factors from your blood are used to help stimulate collagen and blood vessels to repair and regenerate damaged skin, and slow the signs of aging. Originally developed to assist in healing wounds, its indications have expanded to improve skin complexion.

Improvement of skin texture and tone is noticeable immediately after treatment and continues for the next 3-4 weeks. Areas of treatment may include cheeks and mid-face, wrinkling around the eyes, smile lines, nasolabial folds, neck and jaw line, chest, acne scarring, hands, and more. The process typically takes between 30-45 minutes and is performed in an office setting.

Typically, there is little to no downtime associated with the treatment. Normal activity can be resumed immediately, but you should protect your skin from the sun. Because PRP is produced from your own blood, there is no risk of an allergic reaction. In addition, PRP contains concentrated amounts of white blood cells, your natural defenders against infections. PRP offers a more natural method to facial rejuvenation; no artificial fillers and no toxic ingredients, just beautiful, youthful skin!

#### Fade stretch marks with Derma-rolling

Stretch Marks are formed by micro tears in the skin's surface and hormonal changes, typically during periods of accelerated growth. This is most common with pregnancy, but can happen in teens from a growth spurt, or body builders who increase muscle mass. Stretch marks are a type of scarring, in which the skin's collagen production is disrupted. The derma-roller treatment boosts collagen levels to help fade stretch marks by promoting angiogenesis – the growth of new blood vessels.

### Central Vision Loss aided by Digital Tablets

Millions of people are affected by loss of central vision, which may be caused by macular degeneration or diabetic retinopathy. These diseases lead to damage of the retina, the back part of the eye that collects and transmits an image to the brain via the optic nerve. Eyeglasses and readers may be the first line of treatment, but reading aids which offer light magnification may be helpful. However, with the



advances and availability of newer digital tablets, help for people with vision loss may already be in hand.

Research presented at the 116<sup>th</sup> Annual Meeting of the American Academy of Opthalmology showed that people with eye diseases and vision loss can increase their

reading speed
and comfort by
using a digital
tablet. The study
was conducted at

...iPad's back-illuminated screen accounted for the significant improvement in reading speed...

the Robert Wood Johnson Medical School in New Jersey, where researchers found the 100 participants gained at least 42 words-per-minute (WPM) when using the iPad tablet on a 18-point font setting, compared with reading a book or newspaper. A much more modest gain of 12 WPM average was achieved with the original Kindle tablet set to 18-point font.

Researchers believe the iPad's back-illuminated screen accounted for the significant improvement in reading speed, due to increased contrast sensitivity between

the words and background. The original Kindle used in this study does not have a back-lit screen, perhaps accounting for the marginal improvement over books and newspapers.

So if you're looking for a reason to purchase that new iPad, it is scientifically proven to increase your reading speed (assuming you have moderate vision loss).

# Leg pain & Superficial Peroneal Nerve Entrapment

A typical complaint may involve vague pain on the outer border of the legs, and numbness over the top of the feet and big toes. Oftentimes under diagnosed, a small nerve running about 10 cm above the ankle on the outer surface of the leg may be compromised. SPN dysfunction may be from an injury – recent or a few years old, repetitive activity such as long distance running, a tumor, a fascial defect in which the nerve herniates through a defect, or significant weight loss has been reported. *Journal of Brachial Plexus and Peripheral Nerve Injury 2008:3:12* 

Superficial peroneal nerve entrapment results from mechanical compression of the nerve where the nerve pierces the white covering of the muscles and travels closer to the skin's surface. Identifying the condition is the first step, as conditions such as compartment syndrome, stress fracture, tendonopathy, and circulatory conditions may produce similar symptoms. Non-surgical and surgical treatment

options exist for SPN entrapment. Conservative treatment may involve injection or laser therapy, and surgical treatment may involve decompression the nerve at its entrapment site. If the nerve is irreparably damaged or there is a tumor, a neurectomy may be performed.



#### > Gift of Eyesight Program

Don't toss out your old glasses! Please consider donating them to our Gift of Eyesight Program. We will distribute them to people in need.