Low Intensity Laser Therapy when properly applied has an infinite ability to heal. Along with a number of systemic, dermatological and musculoskeletal problems, we may be able to now add shingles to the list of conditions where Low Intensity Laser Therapy may be applied as an effective therapy.

Over the past two years at our rehabilitation centre, we have treated a number of patients afflicted with this sometimes severe viral infection and have been universally successful in treating these conditions.

Herpes in its many forms has long defied traditional therapeutic solutions; at present these comprise:
- Analgesics for pain.
- Anti-inflammatories to reduce the edema/erythema.
- Antivirals to reduce viral replication and shedding.
- Antibiotics to treat secondary bacterial infections.
- A variety of topical ointments.
- Cortisone in severe cases

In essence, there is no definitive approach and the therapies listed above simply modulate symptoms at best.

Symptoms:
- patient feels unwell (prodromal phase - may last from one day to two weeks)
- rash consisting of red spots followed by blister formation
- area extremely sensitive to touch and contact of any kind
- localized to one side of body only and follows nerves (dermatomes)
- may heal by scarring
- pain may be prolonged, along with extreme fatigue and other symptomatology concomitant with the disease

Course:
- must have previous history of chickenpox
- outbreaks are generally related to stress, immune suppression, infections, tumors and the use of pharmaceuticals

Pathogenesis:
Etiological factor is the varicella-zoster virus. Following an outbreak of chickenpox the virus lies dormant within the cells and neural pathways for many years after the patient has had the original attack.
- virus reactivates under the stimulus of stressful conditions
- may cause facial paralysis, blindness, encephalitis
- virus is present at site of rash and is contagious for up to a week after blisters develop
- more common in elderly but younger age groups not excluded

A vexing complication is post herpetic neuralgia as these patients continue to suffer from the signs and symptoms despite treatment with conventional therapies. The pain is not relieved and can be excruciating along with multiple serious sequelae.
There is some evidence that acyclovir and other antiviral drugs slow reproduction of the virus in the nerve cells but this is effective only to varying degrees and is not curative.

In the US, over one million people develop shingles annually and a significant percentage of these develop a complication called post herpetic neuralgia. The pain in these individuals may persist for months and years. The characteristics of this infection vary, are resistant to all forms of treatment and are prolonged. This can lead to depression and a total inability to function.

A number of treatments have been applied for this condition:
- Lidoderm
- Tens
- Nerve blocks
- Epidural injections

Again, these therapeutic approaches attempt to alter symptoms but do not cure the problem. A vaccine developed in 1995, is useful in prevention but has not been widely utilized. This vaccine only has a 20 year effective duration. If children are inoculated early in life it leaves them prone to the more dangerous form of disease later in life, whereas being infected with chickenpox leaves them virtually immune for life.

The virus lodges in nerve pathways, myelin sheaths and cells. As the photos indicate we have treated a significant number of these type of problems over the past 2 years, with a rapid curative effect particularly in dealing with the post herpetic neuralgia problem. Post herpetic neuralgia generally persists long after the dermal lesions have disappeared, therefore cannot be pictorially displayed. It is suggested that low intensity laser therapy is the treatment of choice in these situations.

**Herpes Simplex**

Often, we see other herpes type lesions caused by viruses belonging to the same family of organisms i.e. herpes labialis (cold sores), herpes genitalis (lesions of the genito-urinary tract), etc. that are all variations of Herpes Simplex.

Presented here is a brief discussion of Herpes Simplex, the most common form of herpes. It has an overall prevalence of 20% in the United States, with a slightly higher proportion of infected females (26%) than males (18%). These cases are much easier to treat and resolve. Inevitably they will resolve spontaneously over the course of time.

There are two main benefits of Low Intensity Laser Therapy in treating Herpes Simplex. The first is the rapid resolution of symptoms such as edema, blisters, pain, etc. This effect is most likely due to a number of physiological processes (i.e. increased micro vascular perfusion, improved cellular metabolism, etc.). The second benefit is a reduction in future outbreaks following treatment with LILT. A double blind clinical trial on the effects of LILT on herpes simplex (Shindl & Neumann, 1999) reported that after 10 treatments with LILT the average reoccurrence-free interval between outbreaks was 37.5 weeks, compared to 3 weeks in the placebo group. The results of this study support the clinical experience at Meditech, proving that following treatment with LILT the symptoms are resolved more rapidly and symptom free periods are of longer duration.
Patient 1. Male 57 years;
Acute episode of Shingles and post herpetic neuralgia.
4 treatments over 8 days. Asymptomatic

Patient 2. Male 72 years;
Acute episode of Shingles and post herpetic neuralgia.
8 treatments over 1 month. (First visit 6 weeks post onset of initial symptoms)
Conclusion

Again it would be useful to perform a double blind clinical study using LILT to confirm the clinical results presented. At the same time the assumption may be made that LILT offers a safe effective solution in the treatment of a wide range of viral infections.

The previous cases presented illustrate the curative effects of LILT for the treatment of Herpes Zoster (Patient 1 and Patient 2) and Herpes Simplex (Patient 3 and Patient 4).