LOW REACTIVE LEVEL LASER TREATMENT (LLLT) FOR CHILDREN SUFFERING FROM DIOXIN-RELATED DISABILITIES

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I am a medical doctor from Vietnam. I would like to introduce to *Laser Therapy* readers the application of LLLT for disabled children suffering from dioxin-related disabilities.

Vietnam has only very recently overcome many difficulties. The aftermath of the war has left wounds, not only in our soldiers and people, but deep into the very heart of our country. Although the war ended over 30 years ago, victims of bombs, mines and dioxin not only remain but continue to increase in number. These patients are waiting for modern treatment and for encouragement from friends from all over the world, who will help and share with them the difficulties involved in overcoming, and recovering from, their unhappiness

I am a director of a Rehabilitation Center for children with dioxin-related disabilities in Hanoi, Vietnam. It is called Thanh Xuan Peace Village which is an organization actively supporting charity and humanity. It was organized on December 1991 by OBERHAUZEN International Peace Village and by the Republic Federation of Germany. The presence of Thanh Xuan Peace Village softens part of the grief and losses caused by the war which many families of Dioxin victims are still experiencing.

The Peace Village has been involved in 5 main missions:

1. Rehabilitation of disabled children using both modern and conventional medical treatment such as massages, point acupuncture therapy, operations for the spinal canal stenosis and others
2. Creation of new medical tools and treatment methods

3. Rehabilitation for the development of intelligence by special training methods.

4. Nursing care for the nutrition of disabled children

5. Occupational therapy involving training in simple jobs: sewing, embroidery, knitting, fine handicraft stones and others.

Over the Peace Village's ten years of activity, we have had some successful results:

After over 3000 consultations with our children, many have recuperated enough so that their rehabilitation can be continued by themselves at home. Many children became able to walk on their own legs after extended duration of treatment. Some of them are even able to earn a living from their jobs at the Thanh Xuan Peace Village.

Such results that were obtained, owes much to the care and sharing from both overseas and within Vietnam itself. We believe that such concern brought happiness to our children with dioxin-related disabilities. However, the result and quality of treatment is still not up to our expectations, since we still face many difficulties. Our medical resources are still too small. Such as medical apparatus, and those we do have are not uniform or synchronized. The working rooms are small and not fit for the treatment of disabled people.

In facing those difficulties we have received a great deal of care and support from our Japanese friends, especially from Professor Toshio Ohshiro and Mrs. Masako Matsumoto. The members of the Vietnam Japanese Friendship Association have donated machines for bio-chemical tests, many kinds of medical apparatus and school supplies. Most noteworthy is their donation of the laser hardware for treatment and rehabilitation and contribution of money for treatments. In particular, the help of Professor Toshio Ohshiro and Mrs. Masako Matsumoto has been very effective and has a very high meaning in the development of Thanh Xuan Peace village and in overcoming the village's difficulties.

Today Vietnamese medicine is still on its way up to reach the level of Asia and the rest of the world.

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Medical laser technology has reached some large Vietnamese hospitals, but lasers have not been used in rehabilitation. In September 2004, Tokyo Chuo Rotary Club donated a laser machine to us, the "OhLase HT 2001". At that time, Professor Toshio Ohshiro not only treated patients but also trained us on how to use the laser hardware. That laser was the first laser machine used for rehabilitation treatment in Vietnam and also the first laser machine we have owned (**Fig. 1**).

To the present, we have been using several methods of rehabilitation such as: massage, point acupuncture therapy and other physiotherapy including laser treatment of congenitally paralyzed children, ages from 3 years to 15 years. The initial result of usage to treat 25 paralyzed children were as follows: After using laser treatment on the group of children, progress in motor functions were seen soon after the treatment. Increase in, and stabilization of muscle strength was also seen. The ranges of motion (ROM) of joints have increased and reduction of deformation and contracture of joints have been recorded. The condition of the patients quickly improved with the help of the therapists.

Joint ROM is often reduced after surgery, trauma and cerebral diseases. We carried out LLLT for 25 patients which falls into this category, and the results are as follows:

- The patients became more comfortable
- The patients became more self-confident about their physical capabilities.
- The patients felt no pain during the treatment of LLLT
- LLLT can be combined with mechanical rehabilitation methods.
- The muscle strength recovered to pre- operation and pre- trauma levels.
- In the case of children suffering from cerebral palsy the results of the LLLT group was much better than the results of the group treated with conventional methods.

After 2 weeks of the combined treatment of conventional rehabilitation and LLLT, the patient's pain was completely alleviated. Movement of the neck improved quickly. Through our experiences we came to believe that, without combining laser with rehabilitation, the time of treatment would take much longer.

Thanh Xuan Peace Village has used LLLT for over a year and we have achieved surprising results as mentioned above. On behalf of the patients who have been treated by laser- rehabilitation in Thanh Xuan Peace Village, we would like to thank Professor Toshio Ohshiro who brought modern laser medicine to treat the patients in Vietnam and who helped to develop the relationship between Vietnam and Japan in general and also between the Thanh Xuan Peace Village and Vietnam-Japanese Friendship Association. However we still own only a single laser machine, the OhLase HT 2001 which was donated to us by the Tokyo Chuo Rotary Club and Professor Toshio Ohshiro. We would like to ask the readers of *Laser Therapy* for further support in order for us to continue to overcome our difficulties, where after we would be able to treat even more patients in Hanoi, Vietnam. We will additionally be better able to contribute to the well-being and also the future of children suffering from dioxin-related disabilities which presently can be said to be in its worst situation. Please contact me by e-mail at TXPACEVILLAGE@FPT.Vn with whatever suggestions you might have, and I will be happy to let you know how best you can help us. The children and other patients at the Thanh Xuan Peace Village thank you in advance for your generosity.

Fig. 1: The laser therapy using OhLase HT 2001 is carried out to a patient in Thanh Xuan Peace Village.