

## **LOW LEVEL OF LASER THERAPY (LLLT) OF LASER DIODE 820NM IN THE TREATMENT TRIGEMINAL NEURALGIA**

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### **Abstract**

Twenty-six patients were complaining of trigeminal neuralgia (TN) for more than 2 years. All patients had been submitted to drug therapy with or without other treatment measurements. All patients were from AL-Najaf Al-Ashraf or nearby rural area. They were all treated by laser diode 820nm 1,5 KHz, 2 minutes to the triggered zone, 96 J/cm<sup>2</sup> fluence, and 100m W output. The time between tow sequence sessions was 4 days. The results were very promising. The statistic analysis revealed the significant values between 1KHz and 5KHz and significant values in recurrence rate toward the long duration time. No side effects were recorded. All patients were treated in laser dental research unit, Dentistry College, Kufa University.

### **Introduction**

The trigeminal neuralgia (TN) is the 5<sup>th</sup> cranial nerve. It contain general somatic sensory fibers and special visceral motor fibers. The T.N. has 4 nuclei (N), the spinal N. in the medulla, mesencephalic N, in midbrain, superior sensor N, and superior motor N. in the pons. The T, N. emerge in the junction of pons and middle cerebella pedicle as big sensory and small motor root.

The T.N. divided into 3 branches:

- A/ Ophthalmic division T1
- B/ Maxillary division T2
- C/ Mandibular division T3<sup>1</sup>.

### **Trigeminal neuralgia (Tic Douloureux):**

T.N. is a characteristic symptom rather than disease entity of unknown etiology affecting women more than men 2:1 or 3:4<sup>2</sup>. Usually fifty years of age and older. However, under fifty years of age can occur but one should think of another associated disease as multiple sclerosis with T.N.<sup>3</sup>. T.N. characterized by brief attacks of proxy small severe sharp pain within the distribution of T,N, or its branches<sup>4</sup>. Each attack continue for few seconds to less than one minute. It is a chronic reparative disease<sup>5</sup>. It repeats itself from few times per day to once every few months and usually