

FONTANA CR, BAGNATO VS. Low-Level Laser Therapy in Pediatric Bell's Palsy: Case Report in a Three-Year-Old Child. J Altern Complement Med. 2013 Apr;19(4):376-82. doi: 10.1089/acm.2011.0531. Epub 2012 Nov 9. PubMed PMID: 23140111.

Abstract

Abstract Objectives: The objective of this study was to apply low-level laser therapy (LLLT) to accelerate the recovery process of a child patient with Bell's palsy (BP). **Design:** This was a prospective study. **Subject:** The subject was a three-year-old boy with a sudden onset of facial asymmetry due to an unknown cause. **Materials and methods:** The low-level laser source used was a gallium aluminum arsenide semiconductor diode laser device (660 nm and 780 nm). No steroids or other medications were given to the child. The laser beam with a 0.04-cm² spot area, and an aperture with approximately 1-mm diameter, was applied in a continuous emission mode in direct contact with the facial area. The duration of a laser session was between 15 and 30 minutes, depending on the chosen points and the area being treated. Light was applied 10 seconds per point on a maximum number of 80 points, when the entire affected (right) side of the face was irradiated, based on the small laser beam spot size. According to the acupuncture literature, this treatment could also be carried out using 10-20 Chinese acupuncture points, located unilaterally on the face. In this case study, more points were used because the entire affected side of the face (a large area) was irradiated instead of using acupuncture points. **Outcome measures:** The House-Brackmann grading system was used to monitor the evolution of facial nerve motor function. Photographs were taken after every session, always using the same camera and the same magnitude. The three-year-old boy recovered completely from BP after 11 sessions of LLLT. There were 4 sessions a week for the first 2 weeks, and the total treatment time was 3 weeks. **Results:** The result of this study was the improvement of facial movement and facial symmetry, with complete reestablishment to normality. **Conclusions:** LLLT may be an alternative to speed up facial normality in pediatric BP.