

Pediatrics

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Laser safety in the treatment of pediatric diseases

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Medical education has radically changed in Pediatrics regarding the implementation of new treatment techniques and laser devices, which are noninvasive and painless. When treating a child, the physician should have in mind the differences from adults. It is the doctor's job to cooperate with the child's parents; to have a supportive attitude, in order to eliminate the stress in the little patient. Specific training should include indications for & contraindications against laser therapy, medical precautions & complications, supervised training sessions, and patient aftercare.

The use of lasers in pediatric clinics needs to be planned with particular care: no direct line of sight from the laser to any entry point, and using screens and laser-resistant curtains to restrict the laser area.

Effective laser safety hinges on the following three essentials: appreciating the hazards; controlling the environment; anticipating the problems.

APPLICATION OF LOW LEVEL LASER THERAPY ON CHILDREN

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The specificity of paediatric patients lies within their psychological and physiological differences from adults. Physiologically there is a difference in their metabolic process, hormone balance, the thickness of the skin, etc. Psychologically, children in general "see things with their own eyes" and are afraid of the physician, while the visit to the medical office represents a stress to the small patient. Children can be treated with Low Level Laser Therapy (LLLT) without causing any damage to the tissue. They accept this treatment modality very well because it is a painless and non-invasive therapeutic procedure. Indications are the same as those for adults. The only difference in the treatment of an adult and a child is in applied energy densities. This lecture will present

special approach to the child and conditions, which have to be fulfilled prior to the treatment itself. Recommended energy densities will be discussed in details, with the explanation of particular contraindications in children.