

**The use of CO₂
Laser in Surgery
For Primary and Revision
Stapedectomy**

Proposal

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By

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ABSTRACT

THE USE OF CO₂ LASER IN PRIMARY AND REVISION STAPEDECTOMY

The subject of the thesis is about the refinement in techniques for the Surgical correction of the conductive hearing loss of Otosclerosis in the form of using CO₂ laser in primary and revision stapedectomy.

The general steps of stapedectomy are not affected, laser is used starting from the time of incudostapedial joint separation to placement of the prosthesis the CO₂ laser coupled to the operating microscope was used in all cases of primary and revision stapedectomy.

The advantages of the use of laser is it's precision as the beam can be focused at 20 um with the CO₂ laser, it improves visualization of the surgeon intraoperatively & there is less inner ear trauma.

12 cases were included, 9 cases for primary surgery, 3 cases for revision surgery.

All cases were subjected to full ENT examination, including the tuning fork test, otoscopy and pure tone audiometry all cases were assessed at 1 and 6 months postoperatively.