

# Stapedotomia za pomocą lasera CO<sub>2</sub>

The use of CO<sub>2</sub> laser in stapes surgery

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## Summary

Different microsurgical instruments and laser systems have been used to perform stapedotomy. We evaluated prospectively subjective intraoperative effect of CO<sub>2</sub> laser use during stapedotomy performed under local anesthesia in 67 patients with otosclerosis. Hearing results were evaluated 4-8 months after surgery according to Committee on Hearing and Equilibrium guidelines. The CO<sub>2</sub> laser was used 3-12 times to create a stapedotomy opening. The patients described the effect of laser application as a mild click. Neither tinnitus nor noise was reported during application of the laser on the footplate. The mean air conduction improved for  $30 \pm 12,5$  dB. There was no patient with deterioration of bone conduction (BC) in the group. Mean BC improvement was  $8 \pm 9,1$  dB. CO<sub>2</sub> laser is a safe and effective tool in stapes surgery with no adverse effect on the cochlea. The use of the laser with manufacturer's parameters is not likely to produce unpleasant effects to the patients operated under local anesthesia.