

SMALL FENESTRA STAPEDOTOMIES WITH AND WITHOUT KTP LASER: A COMPARISON

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The results of 33 small fenestra stapedotomies performed using conventional techniques were compared with the results of 33 stapedotomies performed using the argon or KTP laser. The ossicular chain was reconstructed using a Teflon wire piston of 0.6mm diameter, and follow up was at least one year. Over closure of the air bone gap or closure to within 10 dB was accomplished in 91% of the laser treated group versus 72% of the conventionally treated group ($p<0.05$). Transient delayed vestibular symptoms, lasting from 1-3 weeks, were present in 39% of the laser treated group in 12% of the patients treated by conventional techniques. ($p<0.05$).

The KTP laser stapedotomy, using a micromanipulator mounted on the microscope is a safe, efficient technique that reduces some of the technical difficulties associated with conventional stapes surgery. The main advantage of the laser is that it enables the surgeon to make an atraumatic, bloodless opening in a fixed or mobile stapes footplate without mechanical manipulation of the stapes. Using a lower wattage to vaporize the footplate and waiting several seconds between laser bursts may decrease the incidence of postoperative vestibular symptoms. The use of the KTP laser in stapes surgery represents a major advance in surgery for otosclerosis.