

HOW MANY HBO TREATMENTS ARE NECESSARY FOR THE THERAPY OF SUDDEN DEAFNESS AND ACUTE TINNITUS?

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INTRODUCTION:

Since the 1st ECHM conference (1994) sudden deafness is an accepted HBO indication. The aim of this study was to evaluate HBO effectiveness in sudden deafness/acute tinnitus according to number of treatments (10/15).

METHODS:

Patients with sudden deafness and acute tinnitus were treated with HBO after standard treatment (i.v. infusions, rheological drugs) without sufficient improvement. Prior to HBO therapy, after 10 and 15 treatments, and at least 3 months later, we took a tone audiogram and/or a questionnaire with a visual analogue scale (VAS) according to recommendations of the 4th International Tinnitus Seminar, Bordeaux ('91) to determine tinnitus loudness. In the tone audiogram, a threshold recovery in 2 frequencies of over 10 dB and up to 20 dB was regarded as improvement, and over 20 dB as good improvement. In VAS we regarded 50% or less of initial loudness as improvement. Patients were treated 15 times on six days/week, breathing 100% oxygen for 60 min. at 250 kPa.

RESULTS:

From January to June 1996 we treated 129 patients. Mean delay after onset of symptoms was 6 weeks. In patients with sudden deafness (n=43) improvement in hearing was achieved in 11 patients (25.6%) after the 10th treatment and 14 patients (32.6%) after the 15th HBO session. Follow up at >3 months after HBO showed similar results (13 patients). Acute tinnitus loudness was found to decrease by < 50% in 10.9% of the patients after 10 treatments, and in 45.0% of the patients after 15 treatments (n=129). In the follow up, these results were kept within 39.8% (n=123).

CONCLUSIONS:

In sudden deafness and tinnitus 15 HBO-treatments show better results than 10 treatments. These results are confirmed by a follow up 3 months after HBO

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