

Is preoperative bone conduction shape a prognostic factor in otosclerosis surgery?

Rémi HERVOCHON¹, ALIX VAUTERIN², Ghizlene Lahlou¹, Yann Nguyen³, Georges Lamas⁴, and Frederic TANKERE⁴

¹Assistance Publique - Hopitaux de Paris

²University Hospital Pitié Salpêtrière

³Hôpital Universitaire Pitié Salpêtrière

⁴Hopitaux Universitaires Pitie Salpetriere-Charles Foix

June 21, 2021

Abstract

1. We focused on 175 patients operated on for otosclerosis. There were 89 in group 1 (preoperative 4000 Hz BC threshold better than 2000 Hz) and 86 in group 2 (preoperative 2000 Hz BC threshold better than 4000 Hz). 2. Preoperatively, there was no significant difference in terms of average bone conduction (BC) thresholds, average air conduction (AC) thresholds and air-bone gap (ABG) between the two groups. 3. Three months and 1 year after surgery, group 1 had better audiometric outcomes than group 2 in terms of average AC and BC thresholds and ABG. 4. Postoperative BC gain was better in group 1 than group 2, particularly at 500 Hz, 1000 Hz and 2000 Hz. 5. When the 4000 Hz BC threshold was preoperatively impaired (group 2), it was not worsened after stapes surgery. This was not the case in group 1.

Hosted file

Manuscript_Otosclerosis_20210604.docx available at <https://authorea.com/users/310073/articles/527027-is-preoperative-bone-conduction-shape-a-prognostic-factor-in-otosclerosis-surgery>

Hosted file

Table 1.docx available at <https://authorea.com/users/310073/articles/527027-is-preoperative-bone-conduction-shape-a-prognostic-factor-in-otosclerosis-surgery>

Hosted file

Table 2.docx available at <https://authorea.com/users/310073/articles/527027-is-preoperative-bone-conduction-shape-a-prognostic-factor-in-otosclerosis-surgery>

Hosted file

Table 3.docx available at <https://authorea.com/users/310073/articles/527027-is-preoperative-bone-conduction-shape-a-prognostic-factor-in-otosclerosis-surgery>

Hosted file

Table 4.docx available at <https://authorea.com/users/310073/articles/527027-is-preoperative-bone-conduction-shape-a-prognostic-factor-in-otosclerosis-surgery>