Summary and Conclusion

(1) This study measured the early cochlear and vestibular disturbances after 100 primary stapedectomies performed on patients with preoperative good cochlear and vestibular reserve.

(2) The study revealed that a labyrinthine reaction (both cochlear and vestibular) occurs in all cases in response to the trauma of footplate fenestration. It however, subsides in most cases within the first week. It may represent a form of serous labyrinthitis. This reaction gives rise to a reversible functional effect on both the cochlear and vestibular parts of the labyrinth.

(3) From a prognostic point of view, we found that the B.C. response in the early stages (1 st week) gives a useful indication of the chances of a successful outcome. When there is an early failure, there is a high chance that it will persist, and when the early result is favourable. There is a little chance that this will not be maintained.

(4) In addition, we found that there is no difference in B.C. thresholds of our patients exhibiting

postoperative affection of the vestibular function than the other patients. In other word, postoperative disturbance of vestibular function does not seem to be interpretable as a poor prognostic sign as regards cochlear function at a short period in the follow up. Presumably, the vestibular function returns to normal in some cases during the first month following stapedectomy.

(5) Lastly, abnormal postoperative vestibular function may be present without a subjective complaint. This must be seriously respected when considering the second stapedectomy because if vestibular damage also occurs in the other ear, even a minor one, permanent impairment of balance and co-ordination may be produced.