CLINICAL NOTES

SIMPLE OBJECTIVE TEST FOR PARACUSIS

By A. S. DAVIDSON (Liverpool)

THE selection of cases of clinical otosclerosis suitable for labyrinthine fenestration presents the otologist with a difficulty which may only be met by summating every scrap of available evidence. Some authorities (Cawthorne, Hall) regard the pre-operative persistence of paracusis as essential for a successful result. If this proves to be so in the eventual analysis then it is important that paracusis be determined objectively if possible. The alternative has been to accept the patient's statement that he "hears better in a noise" such as in a bus or train. Even if one elicits this information without prompting the answer a positive answer is not wholly satisfactory. Should the paracusis have faded considerably in the immediate past few years, the fact that he had for many years previously noticed such a peculiar phenomena might naturally influence the layman to think it still operative.

If the following test be of interest on a large scale, it may help to relate " objective paracusis " to the duration and severity of the particular case of otosclerosis, and may prove an additional prognostic factor of some value in predicting result from fenestration.

Test. The patient stands with back to observer and is asked to repeat what is said. The limit of the patient's accurate perception of conversation is noted, say two feet. The source of background noise is then activated, and with the observer taking care to maintain his voice constant in intensity, the limit of hearing is again determined. If this increases say to three feet or four feet, the result may be expressed as " improved by one and a half ", " improved by two " etc. It is interesting to note that on ceasing the background noise this increased range does not diminish immediately to normal, but appears to do so over a period of about five to ten seconds. In its original form the background noise consisted of turning on both taps of the wash basin found in most clinical examination rooms.

One patient, however, argued that " the noise didn't suit her ". This resulted in the substituting of Bárány's noise box for the splashing sound of the taps with noticeable improvement in her case. Even so it may be necessary to vary the distance between source of background noise, patient, and observer until a maximum improvement is noted. It might be that comparisons of paracusis may be only valid when dealing in terms of maximum improvement. To obtain this maximum improvement the type and distance of background noise might be varied from patient to patient.

Opportunities of applying the test by a single clinical otologist in a mixed ear, nose and throat clinic have not been frequent. In eight out of nine cases

https://doi.org/10.1017/S0022215100046776 Published online by Cambridge University Press

of clinical otosclerosis the test has been positive to a degree varying from improvement by "one and half" to "three." The case in which it was absent was a lady of 61 who on further detailed questioning admitted that lately she had not noticed the phenomena so well as in her thirties.

Of the two cases submitted so far to operation the paracusis had disappeared post-operatively.

Attention is drawn to the desirability of placing paracusis upon an objective basis by a simple clinical test.

https://doi.org/10.1017/S0022215100046776 Published online by Cambridge University Press