## TREATMENT OF A CASE WITH HYSTERICAL HEARING LOSS

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Miss N., a 18 year old girl reported to the clinic on 4-7-69, with a complaint of hearing difficulty. She said she was experiencing great difficulty in hearing for the previous one month. The case came to the clinic alone and on further questioning she was unable to specify the exact time of onset. She felt that the problem could have been there even earlier but it was probably negligible. She also reported giddiness from the age of 8 years which was treated by several physicians but the case felt the treatment was ineffective.

The ENT examination was negative except for the fact that her ear drums were thickened and retracted. She also showed signs of allergic rhinitis.

She was then tested for her hearing. The first test was done on 6-7-67. In all, three tests were done and all of them with the Beltone 15C Audiometre. The Audiometer is periodically calibrated objectively using B & K Audiometer Calibration equipment. The testing was conducted in an adequately sound-treated room.

The first test showed a mild bilateral sensori-neural hearing loss. The loss in the right ear ranged from 10 dB to 40 dB at various frequencies, the average loss through the speech frequencies being about 35 dB. The loss in the left ear ranged from 15 dB to 40 dB, the average loss being 40 dB.

Because the responses were inconsistent and the audiogram unreliable, a retest was done on 8-7-69. Now the loss, once again bilateral sensori-neural, ranged from 50 to 70 dB in the right ear, the average loss through the speech frequencies being 55 dB. In the left ear the loss ranged from 60 to 85 dB and the average loss through the speech frequencies was 70 dB. Once again her responses were inconsistent and the degree of hearing loss was incommensurate with her ability to respond to normal conversational speech.

A third test was done, therefore, on 10-7-69. In this test, average loss (through the speech frequencies) was 75 dB in each of the ears. However, the speech reception thresholds, using Spondee words, were 25 dB and 15 dB in her right and left ears respectively. Because of these intra- and inter-test variability and a large discrepancy between SRT and average loss through the speech frequencies, functional hearing loss was suspected.

The case was administerted the Eysenck Personality Inventory as a part of psychological evaluation. Her score on the Neuroticism scale was within the

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normal limits. However, she had faked the whole questionnaire as indicated by her lie score and hence her scores on the EPI were not accepted. She was then interviewed at length and a strong defensive tendency was noticed. However, she did reveal that she had several other problems including chronic headache, frequent sleeplessness, backache and frequent mood changes. She also reported a reeling sensation from the age of 8 years. Most of these complaints were treated by several physicians but the case felt that the treatment had not been effective.

The girl came from a lower middle class family. Father, a retired police officer had remarried 8 years ago after the death of the case's mother. She was absolutely defensive when questioned about her relationship with her step mother. The case's own brother was in government service. After her father's remarriage she left her home and was living with her brother. Frequently, the brother used to get a transfer to Mysore and all of them had to live together. Periodically, whenever her brother used to get a transfer out of town, the case would make an effort to go and live with him. She reported in the second interview that her step mother was menatlly ill and was treated at mental hospital earlier.

During these interview sessions there was absolutely no difficulty in carrying on normal conversation with her. It was not even necessary to speak a little louder than the usual (of course, usual for the examiners). Several versions of her audiograms indicated such severe hearing loss that it should necessarily have interfered with normal conversation. All these findings prompted a diagnosis of functional hearing loss—hysteria.

An attempt was made to treat the case with behaviour therapy techniqes. The case, however, was not very regular to the clinic and missed several appointments. In the first session an attempt was made to pair a pure tone stimulus and electric shock. A portable audiometer was used to deliver the pure tone. An apparatus developed to deliver electric shocks to stutterers was used to generate the unconditioned stimulus. The apparatus, consisting of an electric veriac permitted the delivery of electric shock of varying intensity to the finger of the subject.

The subject was seated in one of the sound-treated rooms, wearing headphones and placing a finger on the metal plate of the shock-delivering apparatus. Pure tones of various frequencies above the 20 dB level was used as the conditioned stimulus. Electric shock that was sufficient to elicit a finger withdrawal response was used as an unconditioned stimulus. Twenty minutes stimulation, however, failed to elicit the conditioned response to pure tone stimulus in a consistent manner. The therapy session was terminated at this point.

When she came for therapy the next time, she said there was a slight improvement in her hearing. The same procedure was repeated. The conditioned response—withdrawal of the finger upon the delivery of the tone—appeared now and then but still was not consistent. This was, however, the final session.

She came for the third time, but said she had no time to receive therapy. When questioned about her hearing she said that it was much improved but had difficulty at home when there was running water in the tap. She was assured that there was nothing wrong with her hearing mechanism and what has been done was the theraphy for her problem. The case expressed her inability to continue her visits to the Institute as she was losing classes in the college. She was then advised to visit the Institute if she felt that her difficulty persisted or increased.

She was followed-up after 2½ months. She said that her hearing was normal except for those periods when she would be suffering from cold. She was then suggested to come over to the Institute at a time when she had cold, for examination. She immediately replied that she has not been having cold these days as she was not washing clothes and utensils at home! She reported practically no time, however, to have her hearing tested again. She said it was not necessary at all.

It should be added, however, that it is difficult to specify the effects of therapy in this patient. In any case, this illustrates a possibility of treating functional hearing loss with relatively simple yet scientific procedures advocated by behaviour therapists.

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