Some Remarks on the Classification of Subjective Idiopathic Tinnitus (SIT) — An Essay toward Establishing a Cross-matched Grading System

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Key Words

Tinnitus Classification – Disabling Rating – Legal requirements

ABSTRACT

To better quantify levels of individual impairment caused by SIT, two different sets of classification were cross matched. This combination factored in the inaccuracy caused by terminologic inexactitude. Although the system which developed historically had a subjective bias, the newer tests created to analyze tinnitus specifically were far more objective. By combining the findings of both tests using a numeric score, rating tinnitus should become more exact.

Classification of tinnitus began long ago in ancient Babylon. In the library of the court of King Assurbanipal (668 to 626 B.C.), clay slates were found which gave the first written classification of tinnitus. Later Pliny, Paracelsus, Itard, and Politzer developed separate systems of tinnitus classification.² All these systems can be broken down into the branches of epidemiology, etiology, and legal requirements.

Epidemiology gives information on tinnitus in "terms of time, place, and persons." Etiology provides a means to summarize the relationships between the subjective findings of tinnitus and relationships in terms of pathoetiology.

It is the large numbers of single complaints about tinnitus and possible associated relationships of pathologic relationships that cause the different clinical classification of tinnitus. In terms of legal disability, a more accurate classification will permit graduated comprehensions of the irritation experienced by the patient and related personal, social and occupational interferences. Measuring these grades of impairment will allow comparison of

different types of tinnitus.

Unlike other audiologic failures such as generalized hearing loss and disturbances of equilibrium resulting from vestibular affections, assessment of the intensity of tinnitus and its involvement in personal life is restricted by limitations, because each classification system contains inaccuracies per se.

METHOD

Based on A.M.A. Guidelines for permanent balance and impairment of equilibrium, Shulman divided the range from 0% to 95% into five sections, (Table I) each based on signs manifest in SIT. If this rating system is adapted to the California Scale, and questions formulated according to Glorig's questionnaire (Table II) are used, it is possible to create a cross referencing within the five classes.

DISCUSSION

A combined cross-referencing system provides a table like that shown here as Table III, in which the findings are combined into an accurate and quantifiable system.

The modified classes of impairment, however, accurately measure patient complaint. Because of overlapping classification, the lowest level shown in the California Scale has been removed; consequently such a minor complaint is not accurately described as constant tinnitus. In most cases, the single values shown in the chart agree with the predetermined numbers as shown in the class differentiations, but Class I will allow a criterion standard to be set up for assessment of tinnitus and also show the possible inaccuracies of each discrete system in classifying tinnitus and give clues about the levels of definition intended by patients in describing their chronic SIT.

Table I.

Class Differentiation Modified for Subjective Idiopathic Tinnitus (SIT)

Class 1, 0%

Usual activities of daily living can be performed without assistance

Class 2, 5-10%

Usual activities of daily living can be performed without assistance, except for complex activities

Class 3, 15-30%

Patient's usual activities of daily living cannot be performed without assistance, except with simple activities such as self-care, household duties, walking in the street, and riding in a motor vehicle as a passenger.

Class 4, 35-60%

Usual activities of daily living cannot be performed without assistance, except self-care

Class 5, 65–95%

Usual activities of daily living cannot be performed without assistance, except self-care, which does not require ambulation. Confinement to the home or premises as necessary. Vestibular disequilibrium and hearing loss are present.

Table II.

Glorig's questionnaire

1. Do you hear noises or ringing in your ears or head?

Yes () No ()

2. Is the noise constant or intermittent?

Constant () (3) Intermittent ()

If intermittent, is it:

On more than off () (2)

Off more than on () (1)

3. Does it prevent you from going to sleep?

Yes () No ()

If yes,

Frequently ()(2)

Infrequently () (1)

4. Is it worse in quiet?

Yes () (1) No () (2)

Is it worse when you are not busy doing something?

Yes () (1) No () (2)

5. What does it sound like?

High-pitched tone () (2)

Low-pitched tone ()(1)

Rushing air ()(1)

Static () (2) other () (1)

How much does it bother you?

Mildly ()(1)

Moderately ()(2)

Severely ()(3)

The California scale follows:

Slight = 5

Mild = 6 to 7

Mild to Moderate = 8 to 9

Moderate = 10 to 11

Severe = 12

Table III.

Subclassification of SIT class differentiation.

95	60	30	10	5	Severe
85	50	25	5	5	Moderate

75 40 25 5 0 Mild to

Moderate

65 35 15 0 0 Mild

Class 5 4 3 2 1

CONCLUSIONS

A cross-matched graduated system has been proposed to answer more exactly the needs of medical and legal classifications of disability in order to show specific levels of handicap, and disability for chronic SIT.

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