
EDITORIAL

A Call for Standards and Outcome Measures for Tinnitus Diagnosis/Treatment

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The 21st century is rapidly approaching. We as health care professionals realize the ever increasing demands made by managed health care systems, third party payers and patients wanting assurances that services provided are of proven value and "cost effective". Nowhere is this more evident than in the field of Tinnitology, especially for patients suffering from tinnitus of the severe disabling type. We have not yet met the challenge.

The need for standards and the use of outcome measures is urgent. The need for valid and objective measures as well as subjective measures is well recognized. We must respond by developing an acceptable group of outcome standards for tinnitus to satisfy the demands of managed health care, patients and to improve communication among health care professionals.

To make meaningful comparisons among studies reporting results and success rates using specific diagnostic and treatment protocols there needs to be generalized agreement in reporting standards.

The burden and challenge to the professional and to the patient are the realities that must be faced with regard to tinnitus in 1997/1998:

1. There is no cure for tinnitus.
2. There are many options for relief/control/treatment of tinnitus.
3. Treatment is based on accuracy of diagnosis.
4. There is no general agreement as to the definition of tinnitus, a classification system of tinnitus or mechanisms of tinnitus production.
5. There is no one treatment appropriate for all tinnitus patients.

By facing the reality of the need for standards and

outcome measures we will satisfy the demands of managed health care, create a comfort zone for our patients and challenge, promote, energize cooperation and positive competition among professionals without stifling creativity and innovation.

The increased availability of information provided on a daily basis on the Internet has created a dilemma for patients and professionals. The patient with tinnitus of the severe disabling type is extremely vulnerable and often in their desperation will try any "new" technique reported either anecdotally and/or based on one individual's claim of "success". How should we measure success?

Outcome measurements are needed to help the tinnitus patient become an informed consumer and to make a decision as to choice of care reflecting state-of-the-art diagnosis and treatment for their tinnitus in select centers that specialize in tinnitus.

Significant advances have been made both for diagnosis and treatment of tinnitus since 1977 - including instrumentation e.g., amplification, masking, habituation, electric stimulation; surgery e.g., intratympanic dexamethasone infusion; drug therapy; counseling e.g., cognitive therapy.

There are different centers throughout the world specializing in a specific treatment method, others using combinations or choices of several different methods. Percentage of success is frequently reported. It is important that each center specify their criteria for success.

Questions arise as to why certain centers report an exceedingly high success rate using a specific technique - but this success rate cannot be replicated in other centers. Is the reason for different success rates due to actual differences in how the technique is performed, who performs the technique, or in the way each center defines and measures success? Outcome measurements will clarify these differences.

There are measurement tools currently available. This is not to say that they are ideal. However, we can

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use combinations of selected components of current scales as well as new instruments targeted to specific variables.

Subjective outcome measures include self assessment inventories. Mueller [1] separates subjective outcome measures into those of benefit, satisfaction, expectation and sociologic for hearing aid fittings. These outcome measures can also be applied to tinnitus treatment modalities. Benefit and satisfaction are two different outcome measures. Many times, the patient may be satisfied but the benefit achieved may not be significant. In tinnitus, many times the benefit achieved with a specific technique may be considered significant for the professional but patient satisfaction may be minimal.

Self assessment inventories are frequently influenced by patient expectations. What is available may not be what the patient wants. The patient's desires are not in line with what can be provided currently. The patient wants a cure - a cure does not exist.

Mood disorders are common in patients with tinnitus. Screening for depression is suggested. This can be used to identify patients in need of psychiatric referral, to establish a baseline for each individual and monitor treatment outcomes.

Handicap and disability scales should be used to increase understanding of social and personal consequences.

At the Martha Entenmann Tinnitus Research Center we are routinely using a battery of subjective self assessment questionnaires as outcome measures [2]. These include the Tinnitus Intensity Index rating scale [3]; the Annoyance Index [3]; the Tinnitus Stress Test [4]; the Tinnitus Handicap Inventory [5]; and the Measurement of Depression Scale [6]. The patient completes these questionnaires at the time of initial consultation and at all subsequent visits.

An example of an objective measurement which we are currently using with single cases is single Photon Emission Computerized Tomography (SPECT) of brain. This functional brain imaging technique has increased the accuracy of our tinnitus diagnosis and has provided a method to monitor the efficacy of tinnitus treatment. It has provided objective support for the clinical diag-

nosis that in some patients that tinnitus is a "soft" sign of CNS disease.

Sufficient data is needed to draw meaningful conclusions as to the value of any proposed or currently used therapeutic interventions for tinnitus whether they be medical/conservative, surgical, drug therapy, instrumentation, psychologic, alternative therapies, etc. This will allow assessment of long term benefit for current tinnitus therapies as well. Standards of outcomes will then be based on results and not only method.

All professionals providing services to the tinnitus patient should implement and routinely use outcome measures. The International Tinnitus Journal (ITJ) urges the use of standards for reporting results and "success" of diagnostic and/or treatment protocols through the use of outcome measures.

The ITJ provides a forum to foster progress in the development of standards and outcome measures. We look forward to publishing input on the subject from our leaders and welcome your suggestions and opinions. This will help us meet the challenge together with the result of improved quality care for the tinnitus patient [2].

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