

INTRODUCTION AND WELCOME

Abraham Shulman, M.D.

On behalf of my coeditors and myself, a sincere welcome to all, to the inaugural issue of the International Tinnitus Journal, Volume I, Number 1.

We embark on this venture together, first and foremost to provide a forum for the exchange of both basic science and clinical information of tinnitus. The ultimate aim will be facilitated by the International Tinnitus Journal (ITJ) and shared by us all; that is to achieve a cure for tinnitus, particularly of the severe disabling type.

The overall goals of the International Tinnitus Journal are simply stated:

To publish peer-reviewed manuscripts which are recognized to be informative, innovative, and original, specifically on the subject of tinnitus; and to achieve two goals of science. The first is to report the results of testing a hypothesis. The second is to record original observations and review the state-of-the-art in an area of interest. Papers to be published will attempt to support a conclusion for a theory; and will provide a correlation to benefit the tinnitus patient in both diagnosis and treatment. At all times, attempts will be made to avoid omission of another person's work from text and bibliography; or to promote self justification. We shall maintain the integrity of science.

To publish articles from professionals that are of interest to all who evaluate and attempt to treat tinnitus, regardless of clinical speciality. Too often, new thoughts are restricted by attempts of the establishment to hold within existing structural formats. The format to be followed here will ensure that presentations will provide a forum for discussion. The International Tinnitus Journal will focus on manuscript content and will be receptive and respectful of new concepts and ideas.

To focus on the needs of patients by encouraging authors to submit manuscripts that attempt to understand basic mechanisms of tinnitus production and their clinical applications, for both diagnosis and treatment. Above all, the highest priority will be to attend the needs of the tinnitus patient. This will be accomplished by an integration of clinical and basic science efforts, a process now ongoing internationally. We extend an international invitation to one and all to participate in this effort. The study of tinnitus belongs to the patients and professionals, in that order, not professionals and patients.

To provide a forum for the exchange of ideas. Expertise and assistance in writing and editing will be extended to authors in order to facilitate and expedite the expression of the author's viewpoint. All

professionals who contribute to the ITJ will have complete control over the content of their manuscripts. The peer-review process of this journal to determine the acceptance of an editorial or any other manuscript will be influenced only by the relevance of the manuscript to tinnitus and the manuscript's scientific merits.

The ITJ will not be an end unto itself, but rather a beginning for discussion which has as its goal the ultimate benefit to the patient. Tinnitus is showing us that we must understand the cause of our patients' complaints at a previously unimaginable level of detail.

We are pleased to present this initial collection of manuscripts, which should prove of academic and practical interest to all disciplines involved in the basic sciences and clinical manifestations of tinnitus.

BACKGROUND

The story of the evolution of the ITJ is significant. It is given here to emphasize to others, both now and in the future, what our experience has taught, namely, a need to respect both past and present, and in so doing to benefit from this experience for the future. This is especially applicable for the future endeavors of others, who will attempt to introduce new concepts reflecting clinical experiences manifested by the patients. The history of medicine is replete with the frustrations of professionals who have clamored to be heard; and the frustrations of patients awaiting the application of information to provide relief and cure for clinical manifestations of disease processes considered to be "unknown".

The evaluation of the ITJ reflects the ongoing development of a discipline devoted to tinnitus, that is, *Tinnitology*. All of us thank Harald Feldmann for his outstanding documentation of the history of tinnitus research.¹ The First and Second International Tinnitus Seminars in New York City, in 1979 and 1983—sponsored by the Division of Otolaryngology, Health Science Center at Brooklyn, SUNY—provided an international forum for discussion and integration of past and ongoing efforts for tinnitus diagnosis and treatment and a direction for the future.^{2,3}

The ITJ has been a long time in coming. Originally, the concept of an International Tinnitus Newsletter was presented to the International Tinnitus Advisory Group at the time of the First International Tinnitus Seminar (1979). It was conceived that as professional efforts for tinnitus increased, a publication, that is a journal, specifically dedicated to tinnitus would publish such manuscripts. The initial effort was a Newsletter. Also an International Tinnitus Advisory Group was established as an advisory council for the International Tinnitus Seminars. It was agreed then that an International Tinnitus Seminar would take place every 4

years. The First and Second International Tinnitus Seminars were in New York City, in 1979 and 1983; the Third in Münster, Germany in 1987; the Fourth in Bordeaux, France in 1991; and the Fifth is scheduled for Portland, Oregon July 12-15, 1995. The Sixth is planned for London, England in 1999. The plan was, and continues to be, to provide maintenance of an international forum to exchange information about tinnitus. The dramatic increase in publications on that topic, and professional, patient and public interest on an international level is considered to have been advanced by the International Tinnitus Seminars and the initial proposals in 1979 and 1983.

The model chosen for the International Tinnitus Newsletter was that of the International Brainstem Auditory Response Group. The goal for publication was to reflect ongoing basic and clinical science efforts for tinnitus and to provide a network for exchange of information between professionals involved in both diagnosis and treatment of tinnitus. The forum for presentation of such efforts was to be an International Tinnitus Study Group which would meet internationally at intervals between the formal International Tinnitus Seminars. The International Tinnitus Study Group, originally sponsored by John Shea, Jr. has been ongoing annually during the annual American Academy of Otolaryngology, Head and Neck Surgery, Meeting. Support has been maintained throughout by the Lionel Hampton Ear Research Foundation, the Martha Entenmann Tinnitus Research Center, and the American Tinnitus Association (ATA).

The initial issue of the International Tinnitus Study Group Newsletter appeared July 1, 1984. It was published by the Division of Otolaryngology at the HSCB-SUNY by Barbara Goldstein, Ph.D., and me. Because of financial and time constraints, Jonathan Hazell of the Royal National Institute of Deafness was asked to continue this effort in 1987; it has continued to this date as the International Tinnitus Study Group (ITSG) Newsletter. The International Tinnitus Seminars, International Tinnitus Advisory Group, International Tinnitus Study Group, International Tinnitus Study Group Newsletter were from the start identified as separate and individual efforts. The ITJ was formally proposed in 1987. Delay in its publication reflects respect for different opinions regarding the viability of its publication; and in attempts to join existing journals.

Now, with the international growth of professional interest and involvement with tinnitus from multiple disciplines—the ITJ will consolidate such efforts and serve as a journal for publication of quality manuscripts to further disseminate information among interested professionals involved in attempting to understand and treat tinnitus and hasten the day for its cure.

Growth and development of the ITSG has resulted in an increase

in manuscripts deserving publication. Since 1980, the ITSG has grown in both membership and international interest. To further international participation, a Executive Advisory Committee of the ITSG was formed in 1994 to provide input for future scientific programs and long-range strategic planning. It has been recommended in 1995 that the ITSG expand from its present base in the United States to encourage the formation of tinnitus study groups in other countries. Each group will be called an International Tinnitus Study Group and will be further identified by host country. The groups will select a chairman of their choice. All International Tinnitus Study Groups are requested to consider acceptance of the invitation of Claus-F. Claussen, M.D., President of the Neurotologic Equilibriometric Society (NES), Professor Extraordinarius for Neurotology, University of Würzburg, Germany to participate and coordinate all efforts in the NES-Tinnitus Study Group, 4GF, Bad Kissingen. The NES has been organized for 22 years and has chapters in 48 countries with a membership of over 600 neurotologists. The NES interest in tinnitus is genuine and exemplified by past, present and future programs. This organizational format will allow coordination and rapid dissemination of information to be published in the ITJ.

The editorial board of the ITJ has been selected with the intention reflecting an international character. Invitations have been sent to all parties we know who have an active interest in tinnitus to participate in this effort of the ITJ. The door will always be open to any and all to participate in this effort. Our emphasis will be inclusion, not exclusion. The current plan is to publish the ITJ biannually for the years 1995 to 1997. Thereafter, quarterly publication is planned.

This inaugural issue of the ITJ ought be considered as a start. It is recognized that this issue is not "perfect". We must be allowed room to grow and learn from each other. The problems encountered in this inaugural issue have been many, but were overcome. With constructive criticism, this journal will grow and achieve the goals it set for itself, that is, to promote and hasten a cure for tinnitus and to gain an understanding of tinnitus as a sensory disorder of perception.

Most specifically, letters and comments from readers are welcome. A call for papers has been issued and instructions to authors are included with this issue. Although this is a professional journal, letters from patients will be most welcome. It is considered important that professionals reading this journal respect and be most sensitive to the patients perspective of issues to both diagnosis and treatment. Clinicians should be receptive to such innovative ideas as may be suggested by professionals involved in tinnitus research.

Clinical issues to be addressed will include gerontology, sensory disorders, interface of sensory / affect, sensory coding, affect coding, and mechanisms of different clinical types of tinnitus. Tinnitus is not a unitary

symptom. Increasingly, physicians' reports discuss a "clinical type of tinnitus." The unitary concept, which all of us have been taught, is not finding support in either clinical experience, nor in patient reports. The symptom of tinnitus is marked by its heterogeneity, not only for the parameters of its identification, that is quality, intensity, location, duration, rebound and masking characteristics, but also in the identification of components of complaints now highlighted by considerations of sensory and affect portions. It is suggested that all of us — professionals and patients — be specific in our description of tinnitus; and that professionals delineate to the best of their abilities what clinical type of tinnitus is being discussed.

The ITJ, by focusing specifically on tinnitus, will facilitate the early introduction of new ideas. It is acknowledged that many new concepts and observations presented in the International Tinnitus Journal will probably fail. Who, however, is to say which one will be successful and which one will not be? Above all, no one, right now, in 1995, has "the answer."

Tinnitus is unique. We believe that the ITJ is, and will be, equally unique a journal of the highest professional caliber; free, however, of the imposition of man-made guidelines and man-made committees, which may interfere, by their decision-making process, in the fostering of progress for both understanding mechanisms of tinnitus, and its diagnosis and treatment.

At present, few forums are available, particularly in existing professional societies and journals, for the presentation of specifically new information on tinnitus. This is a general problem that affects tinnitus investigators, both clinicians and basic scientists. With few exceptions, most tinnitus manuscripts are not considered by existing journals to have the highest priority for publication, and consequently are either delayed or not published at all. The result is a lag in the exchange of information among professionals which translates itself into a increase in the time it takes for the information to be applied for patient diagnosis and treatment.

The driving force behind the ITJ, which will always be remembered, is the demand by the tinnitus patient for a cure. Investigators, clinical and basic scientists, junior as well as senior, should have the privilege, during their productive years, to be published. The tinnitus investigator should not have to go to journals of other disciplines in order to be heard. The ITJ will provide a platform for presentation of this new information.

The primary purpose of the dissemination of new knowledge is hopefully to hasten and increase the accuracy of tinnitus diagnosis and treatment to the tinnitus patient.

Tinnitus demonstrates important and complicated links between professional disciplines involved in tinnitus therapy. Specifically, tinnitus

has caused changes in neurotology, otology, professional organization arrangement, and professional ideology. The history of medicine is replete with frustrations on the part of both patients and professionals involved in attempting to understand unknown frontiers in medicine. Tinnitus is today one such frontier. To all professionals involved in this effort, a new discipline has been identified called *Tinnitology*. The ITJ, the journal of this new discipline, will be receptive and open-minded to receive, and will not hesitate to publish, such efforts.

There is an obligation on the part of the co-editors, associate editors, and editorial board to provide the readers with information that is peer-reviewed and is of excellent quality; which advances both basic and clinical science; but which also provides to the tinnitus patient the potential application of this information in giving increased accuracy of the tinnitus diagnosis, as well as in its treatment. The obligations of this journal are equal to all groups, and will focus on the unknown as well as on the known.

The ITJ will create an environment conducive to learning for both medical professional and tinnitus patient. This philosophy has been followed for all our methods, observations, and speculations for tinnitus control and diagnosis of tinnitus. Such a philosophy was the basis of origin of the First International Tinnitus Seminar and succeeding seminars; it is reflected in our publications; it is exemplified in our text; and we shall always follow it. At all times, we will respect differences in philosophy and the privilege will be provided to the reader and the author to understand their respective positions.

There are those who do not believe that at this time it would serve any purpose to list those systems and functions, the failure of which may cause tinnitus, without providing some experimental or functional support for such a hypothesis. The history of science is replete with individuals who have set themselves up as monitors for what should and should not be published. Innovative efforts have been hampered by the attempts of well-intentioned individuals to direct funds, as well as the acceptance of manuscripts for publication that meet *accepted* standards. Yes, standards are necessary, however, respect for ideas is essential.

ORGANIZATION AND FORMAT

The ITJ is the first peer-review journal to provide a forum for the exchange of information for ongoing basic and clinical science efforts for understanding the mechanism of tinnitus production and its application to patients diagnosis and treatment of patients. Subject areas to be covered range from fundamental theory to clinical applications. The goals of the publication are of both academic and practical interest

to all interested professionals; they will facilitate the exchange of information and ideas among all interested professionals.

The ITJ is of both academic and practical interest to disciplines which at present include psychology, neuropsychology, audiology, otology, neurotology and otolaryngology, neurology, neurosurgery, and psychiatry. Increasingly, contributions from cognitive science and behavioral neurology are finding application in understanding tinnitus. Support is found in the increasing number of manuscripts which, since 1985, has been reported by the American Tinnitus Association to have averaged above 100 per year.⁷

Articles included will provide the most timely experimental and observational reports, clinical studies, reviews, and theoretical papers. As space permits, procedures of selected conferences and meetings will be published. Coverage will include but not be limited to:

- neurophysiology of the cochleovestibular system
- comparative anatomy and physiology of auditory and vestibular functions
- electroencephalography
- magnetoencephalography
- psychophysics of tinnitus-related phenomena
- modeling of tinnitus-related neuron networks
- associated complaints of hearing loss, vertigo, ear blockage, and other abnormal auditory sensations
- other sensory complaints of taste and smell
- cognition and memory
- central nervous system disease marked by the symptoms of tinnitus.

The ITJ is organized into sections, each of which has an Associate Editor. Not all sections will be represented in every issue. Along with our usual offerings will be special editorials by Section/ Associate Editors. Special sections and services, for instance, electronic mail and bibliographies, are planned for the future. Future issues will have sections for recent abstracts relating to tinnitus, patient comments, minutes of the International Tinnitus Study Group, letters to the editors, and developments of electrophysiologic testing.

The Sections of the International Tinnitus Journal and the Associate Editors are:

- Audiology – R. Nodar, H.G. Dieroff, M. Miller, R. Sweetow
- Auditory Science – P.G. Loyzaga, M.E. Penner
- Book Reviews/Editorials – F. Edelman
- Brain Imaging – A. Strashun

- Clinical Science – Medicine/Surgery – E. Douek, M.D. Graham, K. Kit Loh, M. Kitahara, L. Podoshin, O. Ribari
- Cognitive Neuroscience – G. Jacobson
- Instrumentation/Devices – R. Guinta, H. Levitt
- Medical/Legal Issues – C. Hart, H. Wedig
- Neurochemistry – C. Norris, K. Ehrenberger
- Neuropharmacology – P. Guth
- Neurotology and Abnormal Sensory Phenomena, Taste/Smell – M.E. Norré, E. Sakata, C. Hart, T. Haid, G.O. Bertora, P. Schwartze, C. Koltchev
- Publication – D. Schneider, L. Constantinescu, A. Hahn, M. Novotny, R. Lukens (Publication Manager)
- Temporomandibular Joint/Orofacial Pain – A. Pullinger

FUTURE

The International Tinnitus Journal is, above all, a journal for the future. And what of the future? We look to the next century as an age where the symptom of tinnitus will gain increasing attention from professionals, one in which science will provide definitive treatment methods for specific etiologies and clinical types of tinnitus.

In 1995 the number of patients with severe disabling tinnitus type is great. The number of professionals involved in basic science and clinical medicine to attempt to diagnose and treat tinnitus is limited. At this time, tinnitus is still considered primarily from an audiologic perspective, with investigations focusing on its psychophysical and psychoacoustical characteristics. Clinical investigations and observations are, however, revealing the medical significance to both patient and physician. Some of us consider tinnitus to be a neurotologic medical-audiologic disorder. Increasingly, the tinnitus patient is forcing professionals of many disciplines to recognize tinnitus as a basic problem in sensory physiology. How does a sensory phenomenon, tinnitus, manifest itself in a behavioral response?

The processes involved in the establishment of the symptoms of tinnitus, particularly of the severe disabling type, and the problems encountered, relate to the overall problem and the question, debated through the centuries, of the relationship of mind and brain and what processes involved in such identification may be. The problem is not only scientific, but also philosophical. This is the reason for the complexity encountered in the diagnosis and treatment of tinnitus.

The so-called decade of the brain of the 1990s has already provided information which we believe is applicable for tinnitus therapy. The ITJ must now and in the future integrate for its readers an understanding of

basic science and clinical investigations directed to understanding the functions of perception, consciousness, cognition, and memory, to name only a few phenomena of central processing. Too little information is now available for patients who increasingly are identifying themselves as having tinnitus, particularly of the severe disabling type.

SUMMARY AND CONCLUSIONS

The ITJ will be cautious in its attempt to mediate between progress and tradition which was the hallmark of the therapeutics in the 19th Century. The net result was that actual practice altered only gradually and incrementally. It is acknowledged that new therapies are derived explicitly from laboratory science. Tinnitus shows clinicians there is a need for evolving both the goals of professional investigation and their application in the daily practice of medicine.

The history of science and of clinical medicine teach and remind those of us involved and dedicated to understanding and diagnosing tinnitus that we must all be ready to confront assumptions all the time, to exercise appropriate caution, but always to avoid unreasonable doubt. It is anticipated that the high quality of the papers published in our journal will be mirrored in an increasing subscriber list in the years to come. It is hoped the information we publish will be considered to be indispensable to every clinician and researcher in the field of tinnitus. This journal will provide access to ideas, theories, and applications in all areas of tinnitus research. The ITJ will attempt to completely fulfill and provide you with a secure sense of knowing what is going on in the discipline of Tinnitology.

Finally, to all readers of the International Tinnitus Journal, please spread the word about us to help us to attract contributors to the publication as well as subscribers. Advertisers are encouraged to share with our readers products or services, which will benefit our patients and readers.

ACKNOWLEDGMENTS

We wish to thank our supporters of the ITJ. Many thanks to the Martha Entenmann Tinnitus Research Center which has made this inaugural issue a reality. Numerous friends and professional organizations have been supportive of this project. A *thank you* to Ray Lukens for his editorial advice and manuscript preparation, and to Barbara Miniero for her devoted and excellent secretarial support. Of special mention the Lionel Hampton Ear Research Foundation; Lionel Hampton, Ken Bussy, Bill Titone, Barbara Goldstein, Ellis Douek, Claus Claussen, Richard Nodar, Jack Pulec, Dieter Schneider, Lucia Constantinescu,

Malcolm Graham, Murray Miller, Cecil Hart, Irwin Wiener, Tom Milhorat, and Florence Edelman. Most significantly my co-editors and I recognize how fortunate we are to have the support of our families in all our efforts.

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