## SHORT TERM SCIENTIFIC MISSION REPORT

## Multidisciplinary Approach To Diagnose and Treat Subtypes of Tinnitus

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<u>Purpose</u>: Purpose of this Short Term Scientific Mission (STSM) was to focus on multidisciplinary tinnitus management approach. During the STSM, the participant would have the opportunity

- a) to follow specific tinnitus management interventions
- b) discuss disciplines, evidence based results and pearls and pitfalls of every day implementation
- c) explore the possibilities of adapting new methods or improve practice based on host institution's approach
- d) plan future collaborations on the research field.

<u>Work description</u> During the STSM, the opportunity was given to participate in patient's counselling and management in three different settings and by three different experts, according the STSM program. This kind of approach was really fruitful since STSM was clinically oriented. Opportunity was given to become familiar with tinnitus multidisciplinary approach standard of care and discuss both theoretical background and practical implementation issues.

In particular, recruitment of more than 20 patients took place both by ENT tinnitus specialist doctor (Alessandra Fiorietti). There was a chance to discuss diagnostic approach methodology, questionnaires and other diagnostic tools used, laboratory examination battery and management strategy. Each of these dimensions was analyzed and discussed based on specific examples f patients, so that experience could be shared and the diagnostic workflow and protocol followed by this centre would be theoretically explained and practically demonstrated.

On top of this, the opportunity was given to participate in multidisciplinary management sessions, including psychological intervention (behavioural therapy), music therapy of tinnitus with use of the Tomatis method and mindfulness.

Especially regarding Tomatis therapy, opportunity was given to take a close look on the method with the help of Carmella Stillitano. Setting, basic principle, equipment used, practical implementation, treatment results were discussed in detail. Special consideration was given to indications and practical implementation of this method, as well as to expected results. Manual of the Tomatis sound engine was shared and special aspects of therapeutic protocol were highlighted. Overall, an integrated approach of Tomatis method was offered.

STSM also included a visit to hearing aids implementation centre. Opportunity was given to discuss with experienced audiological technicians about latest tinnitus maskers, their indication and relevant practicalities. Participants were able to follow hearing aids implementation and tuning in real patients and discuss on indications, protocol followed, practical problems and results.

Furthermore, a round table brainstorming session was arranged in order to plan further research collaboration, and more specifically, about a common protocol for a multicentre study. Host Institute, David Riedl from Medical University of Innsburg, Austria and me discussed in depth rationale aim, methodology, power, groups of participants, potential practical problems and expected impact of a multicentre study aiming towards validation of a newly introduced questionnaire about tinnitus perception, based on similar questionnaire about chronic pain.

During the last day of the STSM, a conference meeting was organised, Participants in the STSM were invited speakers. During this successful congress (participants exceeded expectations by far), opportunity was given to disseminate TINNNET project, evaluate STSM results and exchange clinical experience among tinnitus patients.

**Results** The STSM was really fruitful, since all main objectives were fulfilled. Exchange of clinical experience was achieved regarding common and rare cases management and ways to increase efficacy of interventions. Effect of multidisciplinary approach was highlighted. This is significantly important about 1<sup>st</sup> Otolaryngology Department of University of Athens, since tinnitus management did not include these dimensions until now and insight and motivation gained and practical advice was necessary in order to expand tinnitus therapeutic spectrum.

Significant results can be summarized as following

- After this STSM, it was decided that in University of Athens, (participant's institute of origin), a collaboration with the Psychology Department will be obtained, aiming towards psychological counselling and behavioural therapy in selected tinnitus cases. Psychologists will corporate with 1<sup>st</sup> Otolaryngology Department of University of Athens tinnitus clinic and will start recruiting patients who fulfil criteria for this kind of approach. Milestones of this approach will be transferred from Rome Tinnitus Centre experience. This will be the first similar attempt in public hospitals in Greece and therefore is expected to have great impact.
- Moreover, there was a detailed presentation of the Tomatis method, which is performed by Dr. Carmela Stillitano. There is no relevant service available in Greece, so this STSM could be the trigger for this method's dissemination, since there is the possibility a Phd student of the 1st Otolaryngology Department of University of Athens plans visiting a Tomatis training centre in order to develop relevant skills.
- Additionally, during this STSM, the opportunity was given to discuss with the directors of the audiologist's training program in Rome, which

- is already 20 years old. Experience shared and education program have already been used for improving an already planned audiologists' web based educational program, which will fill the gap of relevant education in Greece and therefore is expected to have great impact.
- Finally, the protocol of a multi centre study was agreed with participation of the host institute and Medical University of Innsburg, Austria regarding a newly introduced questionnaire about tinnitus perception and acceptance.

<u>Future Collaboration</u> As already mentioned, a multicentre study aiming towards validation of a newly introduced questionnaire has been planned and data has already started be collected. This multicentre study will, after Ethics Committee approval, collect data from more than 200 patients in order to validate tinnitus acceptance questionnaire. Expected impact of this study is release of a clinically validated questionnaire about tinnitus acceptance, which will be useful for correlation of acceptance with prognosis, patients' categorisation and treatment directions.

Furthermore, future collaboration between institutions might possible at the level of audiologists education, since by 2016, 1st Otolaryngology Department of University of Athens will lead the first official audiologists professional training program. Experience of the 20 year old program, textbooks used, teaching methods and educational program will be evaluated and used as possible referral patterns and resources.

<u>Foreseen publications</u> Following the end of the aforementioned study, a publication of the results will follow.

On top of this, it was decided that 1st Otolaryngology Department of University of Athens, currently only using Tinnitus Handicap Inventory(THI), the only available validated questionnaire in Greek, will also include Tinnitus Questionnaire and Tinnitus Handicap Questionnaire, in order to be harmonized with the two other tinnitus centres that will participate in this study. To this end, translation and validation procedures are necessary, will be conducted and relevant papers will be published.

Impact of these actions is significant, since two widely used and accepted tinnitus questionnaires will become available and disseminated in Greece.

<u>Comment</u>: Special thanks to host institution and especially Dr. Alessandra Fioretti for excellent organisation and hospitality.