REPORT FROM THE 31ST POLITZER SOCIETY MEETING AND 2ND OTOLOGY RESEARCH FORUM, 21–24.02.2018, GRAN CANARIA, SPAIN

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Auditorio Alfredo Kraus.

The 31st Politzer Society Meeting and 2nd World Otology Research Forum was held from 21 to 24 February 2018 in Las Palmas de Gran Canaria. The Institute of Physiology and Pathology of Hearing (IPPH) was represented by Prof. Henryk Skarżyński, Prof. Piotr Skarżyński, Magdalena Skarżyńska, M.Sc., Justyna Kutyba, M.Sc., Marika Kruszyńska, M.Sc., Monika Boruta, M.D., Magdalena Kozieł, M.Sc. and Joanna Rajchel, B.Sc. The opening ceremony took place in Auditorio Alfredo Kraus, which was graced with a concert and dance performance.

During the first day of the conference, presentations from auditory implant companies were given, highlighting the latest technological solutions. The focus was on advantages, new possibilities, and applications. On February 22 there was a round table on preserving functional hearing after cochlear implantation. Prof. Piotr Skarżyński gave outcomes of patients treated at the World Hearing Center and implanted according to the Skarżyński 6-step procedure, who obtained very good results. All the session panellists agreed that the aim of cochlear implantation should be to maximally preserve the delicate structures of the cochlea, a move that will allow the latest technologies to be used in the future.

Representatives of four companies – Med-El (Claude Jolly), Oticon Medical (Edward Overstreet), Cochlear (Jan Janssen), and Advanced Bionics (Patrick Boyle) – spoke about the latest technology and what awaits in the future as regards cochlear implants. Conference participants



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were told that all companies were constantly working on adapting to the needs of patients. To meet users' expectations, they are seeking to minimize the size and visibility of the prostheses and even implant them completely under the skin. All representatives underlined that, while making the latest technologies available to patients from all countries, they would try not to increase production costs.

A session devoted to tinnitus and hearing loss covered issues related to diagnosis and treatment. Promising results of the use of steroid therapy in preserving the hearing of patients with partial deafness and tinnitus in the World Hearing Center of the IPPH were presented. This improtant research was held by the team coordinated by Prof. Piotr H. Skarżyński. In other studies, the need to continue research on the use of transcranial magnetic stimulation in tinnitus treatment was discussed. Currently, there is no evidence for the superiority of this therapeutic approach over the use of a placebo. Attention was also given to the need for research on sleep disorders in patients with very troublesome tinnitus, and how in particular a therapy to prevent insomnia could be developed. Joanna Rajchel, B.Sc. presented the results of work carried out at IPPH which showed that how well a patient copes with stressful situations is significantly related to their tinnitus distress.

The next session was devoted to miscellaneous topics, and one of them was unilateral deafness. Dr Steven Cheung presented the results of research on brain plasticity in people with unilateral deafness, and what changes there were in comparison to those with bilingual hearing. Marika Kruszyńska, M.Sc. presented work on the subjective assessment of auditory benefit in patients with unilateral deafness who use cochlear implants. The results showed that cochlear implant users report subjective benefits

after implantation in the deaf ear, even when they don't have tinnitus, a conclusion that was met with great interest because until now cochlear implantation in unilateral deafness has mainly been used to reduce tinnitus.

A meeting of members of the Politzer Society was held, during which Prof. Piotr H. Skarżyński invited everyone to the next 32nd Politzer Society Meeting, which will be organized by IPPH in Warsaw on 28.05–1.06.2019.

On the second day of the conference, a session on middle ear implants took place, during which Prof. Piotr Skarżyński presented results of using the Vibrant Soundbridge. The work showed that many patients experienced good benefits with the device. The session was also an opportunity to exchange experience with workers from other ENT centres.

During a session devoted to otosclerosis, Joanna Rajchel, B.Sc. presented the results of the largest global material of patients qualified for stapes surgery whose tinnitus was comprehensively assessed with a set of validated tools. The results indicated that among otosclerotic patients almost one in five reported tinnitus of such severity that professional help was needed. Diagnosis and treatment of otosclerosis was also the topic of an expert panel, in which specialists from around the world tried to answer questions about the effectiveness of pharmacological treatment of the disease, the usefulness of computed tomography in pre-operative assessment, teaching programs on stapes surgery for doctors training in otosurgery, how to proceed with complex cases, and long-term results.

Another session was devoted to complications that can be encountered in children using cochlear implants. Prof. Dan Jiang, Prof. Jamie Marco, Prof. Caglar Batman, and Prof. Piotr H. Skarżyński shared their experiences with difficult pediatric cases. Prof. Piotr H. Skarżyński presented material, the largest in the world for children with partial deafness, and gave a reminder that implantation through the round window preserves cochlear structures.

On the third day, Justyna Kutyba, M.Sc. presented results of research on the use of mobile apps. One was an app for self-testing hearing and a second for tinnitus reduction. Very promising results were presented, indicating the real possibility of using mobile apps in medical practice.

During a poster session, Justyna Kutyba, M.Sc. shared the experiences of IPPH in conducting hearing screening tests on schoolchildren in Africa and Asia, and summarised the results. She also presented the results of patients with tinnitus who had auditory implants and experienced a significant reduction in distress following hearing rehabilitation. Joanna Rajchel, B.Sc. presented work comparing tinnitus annoyance among people with hearing loss to those with normal hearing. She also presented the results of a retrospective study of bone-conducted implants in adults, pointing to the need to use specific health-related tools (including questionnaires measuring the quality of hearing in different acoustic environments) rather than tools measuring general well-being and quality of life. Magdalena Kozieł, M.Sc. presented audiological results as well as questionnaire results of patients implanted with the Bonebridge system. She highlighted the adverse events and complications that may occur after implantation of the Baha Attract and Ponto implants, both in the immediate post-operative period and long term. During the poster session, another study assessed the auditory benefits of the Baha Attract system in patients 12 and 24 months after implantation.

During the 31st Politzer Society Meeting, many novel and interesting findings were presented, such as the vestibular implant. Because hearing loss usually occurs in the operated ear after implantation of a vestibular implant, it is additionally equipped with a cochlear electrode (so now we can talk of cochlear-vestibular implants). Another interesting fact is that the new Carina implant, now entering the market, also has a speech processor that provides additional reinforcement or – in the event of internal discharge – ensures that power is maintained.

Sessions on endoscopic techniques in otology also attracted great interest. Lecturers presented various surgical techniques for removing a cholesteatoma and different methods of obliterating the post-operative cavity, using and comparing materials currently available on the market.

For the entire duration of the conference there was a promotional stand for the 32nd Politzer Society Meeting and III World Otology Research Forum organized by IPPH, which met with large interest. The President of this Congress will be Prof. Henryk Skarżyński, reflecting both the recognition of international scientists for the output of Polish otologists and the contribution Prof. Skarżyński has made in the development of world medicine.



Justyna Kutyba, M.Sc. presenting the results of hearing screening tests conducted among schoolchildren in Africa and Asia.



The promotional stand for the 32nd Politzer Society Meeting and III World Otology Research Forum. From left, Monika Boruta, M.D., Marika Kruszyńska, M.Sc., and Joanna Rajchel, B.Sc.