# BORDERLINE PROBLEMS IN OTORHINOLARYNGOLOGY

PROCEEDINGS
OF THE XIIth WORLD CONGRESS
OF OTORHINOLARYNGOLOGY

EDITED BY L. SURJÁN GY. BODÓ

# BORDERLINE PROBLEMS IN OTORHINOLARYNGOLOGY

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Distinguished Guests, Ladies and Gentlemen,

On behalf of the Minister of Health of the Hungarian People's Republic, Dr. Emil Schultheisz, and myself let me warmly welcome all participants of the XIIth World Congress of Otorhinolaryngology. It has been a great honour for the Hungarian Society that it has been commissioned by the Executive Committee of the International Federation to organize the XIIth World Congress. In that decision I think not only the favourable geographical situation of our capital, but also the achievements of Hungarian medicine in general, and of otorhinolaryngology in particular have played a role.

The Hungarian and foreign organizers have done everything to make this Congress a success and I hope that their efforts will be rewarded by further achievements in this field.

In this turmoiled world of ours let us hope that you to come from different countries speaking different languages will find a common medium, the language of science.

May this Congress be fruitful in scientific achievements and every participant cherish pleasant memories of our country and our culture.

Hereby I declare the XIIth World Congress open.

I. Hutás Deputy Minister of Health Dear Colleagues, Ladies and Gentlemen,

It gives me great pleasure and I consider it an honour to be able to greet you here on behalf of the Presidium and Membership of the Hungarian Academy of Sciences. Although in this country your profession, like all branches of medicine, stands under the supervision of the Ministry of Health, the Academy of Sciences, as the organization holding primary responsibility for the coordination of all scientific efforts, tries to share some of the heavy burdens of the Health Authorities.

Scientists of this country - or those who have spent part of their careers in this country - had a significant share in the basic science aspects of your profession. First and foremost, I should like to mention Jan Čermák, the great Czech physiologist, who, following the discovery by Manuel Garcia in Spain, made his great contribution to laryngoscopy while a professor of the Budapest Medical School in the 1850s and early The achievements of Endre /Andreas/ Hogyes - whose portrait is exhibited here - is less well known due to a combination of unfortunate circumstances. His studies conducted in the late 70s and early 80s of the 19th century on the labyrinthine reflexes are among the most ingenious inquiries into a complex mechanism, which equal those of the great Flourens and Cyon. Unfortunately, he reported his findings only in Hungarian and, in addition, in a cumbersome style. Before being able to publish

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them in any other language, he became interested in the Pasteur inoculation against rabies and left the field.

He was ingenious in understanding that each semicircular canal, or, more correctly, its receptor, had direct reflex connections with two eye muscles - one in each eye - acting in the same plane as the position of the duct. This was the fundamental biological mechanism of the gyroscopic stabilization mechanism of eye position. This is still not correctly understood by most scientists in this field, although I thought that my studies had substantiated Hogyes' findigs. Naturally, if the ocular reflexes are studied by recording the position of the eye using some markers on the cornea, the researcher will miss the essence and will arrive at the erroneous notion that different eye positions in various animal species require fundamentally different reflex mechanisms. This may be so in a very limited sense for refinements, but the design of the labyrinthine reflexes for the eye movement is general and principally as understood by Hõqyes. This is also of some philosophical relevance, as an example of "preadaptation", i.e. adaptation in phylogenesis often anticipates certain necessities before they arise, something not explained by modern Neodarwinism, but that has been foreseen by the genius of Johann Wolfgang v. Goethe in his "Morphologie".

Unfortunately, when Robert Bárány came forward with his magnificent discovery of the caloric reflex, and a pupil of Hőgyes translated his papers into German in 1911 - without the necessary adaptations to Sherringtonian neurophysiology that had meanwhile developed - it was far too late for Hőgyes' discovery to gain much international attention.

<sup>\*</sup>The elementary vestibulo-ocular reflex arc. J. Neurophysiol.

13, 395-407, 1950; Die Rolle der einzelnen Labyrinthrezeptoren bei der Orientation von Augen und Kopf im Raume. Akadémiai
Kiadó, Budapest, 1952; Pathways and synaptic articulation
patterns connecting vestibular receptors and oculomotor nuclei,
in: The Oculomotor System /ed.: M.B. Bender/, Hoeber Med.

Division, New York 1964.

Last, but certainly not in the least we, of course, have to mention the greatest genius in this field: György /George/ Békésy whose fundamental discoveries were achieved as an engineer at the Budapest Postal Services before and during World War II. Not only had he formulated his fundamental theory on cochlear functions but in private conversation he revealed his magnificent insight on how inhibitory mechanisms interfere with sensory perception. His bust, exhibited here, was made by his brother, the late Miklós Békésy, who survived him by several years.

It is a special privilege that fate bestowed on me by giving me this opportunity to return - even if for a brief moment - to a field in which I had made some humble efforts many years ago. As the French saying goes "...on revient toujours à ses premiers amours...". However, it is mainly as a token of my admiration for the two ingenious scientists who laid some of the theoretical foundations of your profession, both brought forth from this country, and to whom I am greatly indebted, that I want-my opening address to be understood ..... beyond, of course, my welcome to you all.

János Szentágothai

President of the Hungarian Academy of Sciences

### WELCOMING ADDRESS

Ladies and Gentlemen, Dear Friends.

First of all I should like to express the thanks of the Hungarian oto-laryngologists for your having accepted our invitation. It is a great honour for us to be the host of the World Congress, and we are very happy to have the opportunity to welcome the participants and their families.

Dear Colleagues, as I know the first International Congress of ORL was held in New York in 1876. This was followed by the meetings in Milan /1880/, Basel /1885/, Brussels /1888/ and Paris /1889/. The subjects were chosen alternatively from the field of otology or rhinolaryngology. In 1909, the XVIth International Medical Congress with special Otological and Rhinolaryngological sessions was organized here in Budapest.

At that time some controversies and confusions occurred due to the lack of a centralized supervision.

Unfortunately, the Congress in Berlin in 1911 was followed by the First World War, which produced serious antagonisms among the oto-laryngologists as well. This was to be felt also during the Xth Congress in Paris, in 1922.

The confusions caused by the separate otological and rhinolaryngological congresses and the antagonisms were solved at the Congress in Copenhagen in 1928. In the history of our society this congress was recorded as the first oto-rhino-laryngological congress. Unfortunately, the continuity of these congresses organized every fourth year was interrupted again, by the Second World War. At present, at the opening of the XIIth World Congress it seems to be necessary to mention the IFOS, which was founded in Japan in 1965. From this time on the world congresses were organized under the auspices and supervision of IFOS, and now new organizing regulations of the congresses have been prepared. I hope that they will be approved by the General Assembly during this Congress.

In my opinion the development of the activity of IFOS has reached a very important point: it seems to be necessary to establish a closer collaboration between the IFOS officers and the member societies. We have to do our best not only in the organization of the World Congress, but also in solving different problems, e.g. the Educational Program, especially in the developing countries, the function and role of the regional groups of IFOS, the organization of regional meetings, etc., however, without encroaching on the independence of the member societies. We have to be ready at any time to assist in the training of young physicians and in postgraduate studies. We have to organize a more successful and rapid exchange of information between the member societies and the IFOS. These, among others, will be the task of the future officers of IFOS.

Although our language, being of rather limited dissemination, is not the official language of the Congress, this does not mean that the treasures of Hungarian culture will be inaccessible to you. Music and dance are international media of communication. Two men of genius will come to our recourse in this respect, Béla Bartók and Zoltán Kodály who are well known all over the world. This year we celebrate the hundredth anniversary of Béla Bartók's birth; that of Zoltán Kodály will be next year. I most warmly invite all the guests to listen to their music and to see Hungarian folk dances in the evening of June 24.

At the International Medical Congress in 1909 which I have mentioned above, the General Secretary, Professor Emil Grosz, finished his speech as follows: "Never did mankind need the inspiring, reassuring and reconciling effect of science as much as at present, when we witness desperate fight among the nations.

Pasteur was right in stating that science embraces all mankind. All nations can be united in scientific work, especially in the medical sciences, because humanity is served by them.

All political discussions are excluded from our meeting - except one: to forget antagonisms and to join forces. We do not know any other weapon than that of sciences. We have no other purpose than the benefit of mankind."

These words are in agreement with the constitution of the IFOS.

Finally, I wish you successful discussions and a very pleasant stay in Hungary.

L. Surján

President of the Congress

The present volume contains the proceedings of the XIIth World Congress of Oto-Rhino-Laryngology held in Budapest /Hungary/ from June 21 to 28, 1981.

We regret that the proceedings do not comprise all the presented papers; however, all the subjects discussed at the round table conferences are covered. The papers of authors who did not submit their manuscripts in time had unfortunately to be omitted.

In the preparation of the scientific programme of the Congress some important aspects had to be taken into consideration. First, like in all other fields of medicine, there is a clear tendency to superspecialization in ORL, too. Besides the obvious advantages, we have to see also the disadvantages of this process.

The main subjects of the Congress were selected from among the border-line problems of ORL, i.e. those studied in cooperation with other fields of medicine /e.g. ophthalmology, neurology, oncology, etc./.

Besides maintaining a high professional level, the moderators were asked to take into consideration the fact that most of the participants were practising otolaryngologists. That is why the main emphasis was laid throughout on the practical conclusions.

We have by all means to avoid otolaryngology from getting broken up into small fields and have, therefore, strived to give a general overview of the present state of otolaryngology.

L. Surján

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