A historical review of the International Symposia on Recent Advances of Rhinosinusitis and Nasal Polyposis, organized since 2000 around the world

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Abstract: Background: The problems of rhinosinusitis and nasal polyposis have been discussed further back in time. Nature of nasal polyps is diverse. Therapeutical approaches back then were original and strange in some cases. Connections with rhino-sinu-nasal pathologies have been proven in patients with obstructive sleep apnea. Data shows that OSA severity is directly related to the response of the tissues in the area.

Materials and methods: Scientific databases – PubMed, SCO-PUS and MEDLINE were used to search for gathering the data in need. The following keywords rhinosinusitis, nasal polyposis, treatment. Information and data from the official websites of the organizing committees has been used.

The aim of the following article is to study the history of rhinosinusitis and nasal polyposis diagnosis and treatment development.

Results and discussion: Acute and chronic rhinosinusitis and nasal polyposis are conditions more frequently diagnosed nowadays, due to the multifactorial etiology they are linked to. Authors have been continuously working on the field, more abruptly since the year of 2000. A number of scientific events have been organized, where clinicians reached to consensus and issued guidelines on how the mentioned conditions should be treated. FESS and computer aided surgeries have been in the focus in the last 10 years.

Conclusions: Rhino-sinu-nasal pathology is directly related to the quality of life of patients affected. Therefore, clinicians should continue working in the field, and investigating the root causes of the disorders. More attention is to be brought on the allergic etiology, often main cause of the nasal pathologies.

Key words: rhinosinusitis, nasal polyposis, recent diagnosis and treatment advances, obstructive sleep apnea, allergies

Background

Scientists date back the first studies on the topic of nasal obstruction back to Hippocrates. He reported in "De Morbis Liber" on patients affected by nasal polyposis. Nature of nasal polyps is diverse. Therapeutical approaches back then were original and strange in some cases. (1)

Apart from Hippocrates, Georges-Fernand Widal had as well worked on the matter. The reported Widal syndrome from 1922 included nasal polyposis, asthma, aspirin intolerance.

Connections with rhino-sinu-nasal pathologies have been proven in patients with obstructive sleep apnea. Data shows that OSA severity is directly related to the response of the tissues in the area. (2), (3), (4)

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Results and discussion

Acute and chronic rhinosinusitis and nasal polyposis are conditions more frequently diagnosed nowadays, due to the multifactorial etiology they are linked to. Authors have been continuously working on the field, more abruptly since the year of 2000. A number of scientific events have been organized, where clinicians reached to consensus and issued guidelines on how the mentioned conditions should be treated. FESS and computer aided surgeries have been in the focus in the last 10 years. (1), (2), (4)

In Table 1, the reader can observe the International symposia on Recent Advances in rhinosinusitis and Nasal polyposis, organized in the period 2000-2019.

Table 1. List with International symposia on Recent advances in Rhinosinusitis and Nasal polyposis, held in the period 2000–2019

City	Year of	
Sien	2000	
Zag	2002	
Bru	2004	
Mosc	2006	
Ankara	2009	
Kiev	2011	
Matsue city,	2013	
Panama	2015	
Kuala Lumpur	2016	
Manila	2017	
Bangalore	2018	
Brasilia	2019	

The 1st International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Siena, Italy in the period 5–7.10.2000. Main organizer was the ENT Department, University of Siena Medical School. President of the Symposium was Prof. Dr. Desiderio Passali, MD, PhD. (1)

At that time, the start of the 21st century, nasal polyposis was relatively common disease, affecting

4% of the general population above 40 years of age. Male to female ration was 2:1. Clinicians and researchers focused on the origin of the disorder, situated in the oro-facial structures. They tried to explain the pathogenesis of the polyps' formation, based on the pathologically modified airway streams. (1)

The 2nd International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Zagreb, Croatia in 2002. President of the Symposium was Prof. Dr. Ranko Mladina, MD, PhD. 17 renowned experts in the field of rhinosinusology from European and American countries tried to achieve consensus on the etiology, possible conservative and surgical approaches to cope with the polyposis. A digital vote was executed, where participants voted the following, shown in Table 2. Participants fully agreed that the goal of the Society will be to fight radically against the enigma of nasal polyps. (1)

Table 2. Voting results from the 2nd International symposium on Recent advances in Rhinosinusitis and Nasal polyposis, Zagreb, Croatia, 2002

Question	Answer	%
Nasal polyposis will disappe	In more than 10 years but it will happen	62.5
Do you support the idea of establishing an International Society for Nasal polyposis?	Yes	71.4
Do you support the	Yes	80.0

The 3rd International symposium on Recent advances in rhinosinusitis and nasal polyposis was held in Brussels, Belgium in 2004. Scientific president of the symposium was Prof. Dr. Peter Clement, MD, PhD. A therapeutic proposal was marked – Furosemide by nasal inhalation. Ion channels theory was introduced, supported by the correlation nasal polyposis-cystic fibrosis. Defective or reduced expression and altered ion channels, controlled by Furosemide, leading to rhinosinusitis and nasal polyposis. Results from a study conducted showed that total nasal volumes measured with acoustic rhinometry rose after treatment with Furosemide by nasal inhalation. (1)



The 4th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Moscow, Russian federation in 2006. Scientific president was Prof. Dr. Andrey Lopatin, Md, PhD. Back then, nasal polyposis was based on two main theories. According to the first theory, S. aureus released enterotoxins which trigger T-cells activation. There is a release in Il-4, Il-5, Il-13. All leads to chronic inflammation. Second theory discussed the presence of fungi. Surrounded by eosinophils. Chronic inflammation is again present. New therapeutical proposals were implemented, based on these theories. (1)

The 5th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Ankara, Republic of Türkiye in 2009. President was Prof. Dr. Metin Önerci, MD, PhD. New therapeutic perspectives were introduced – nasal lavage with amphotericin B. Another approach was the S. aureus vaccination therapy. Functional endoscopic sinus surgery (FESS) was given the floor. (1)

The 6th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held

in Kiev, Ukraine in 2011. President was Dmytro Zobolotnyi. Clinicians discussed "the near future" – Computer assisted surgery (CAS) and the Virtual endoscopy. CAS introduced three-dimensional view in real time, which guaranteed full control of surgical procedures. "The remote future" ("not too far") was as well discussed, which included the Tele-FESS. The procedure led to a decrease of intra- and post-surgery sequelae and a decrease of health care costs. (1)

The 7th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Matsue city, Shimane, Japan in the period 4–6.10.2013. President was Prof. Dr. Hideyuki Kawauchi, MD, PhD, DMSc – professor and chairman of the Department of ORL, Faculty of Medicine, Shimane University. Symposium was organized by the Nasal polyposis consensus group. The venue was Shimane Prefectural Convention center "Kunibiki Messe", Matsue city, Shimane prefecture, Japan. On Fig. 1, the official banner of the symposium is presented. (1)

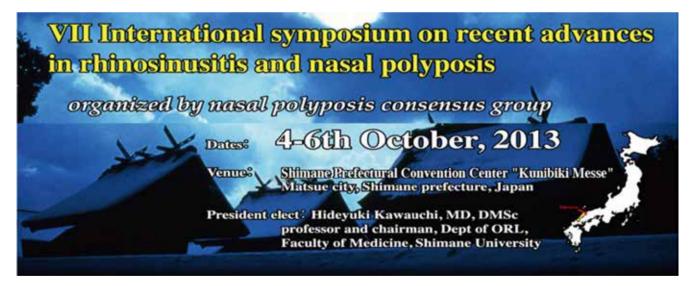


Fig. 1. Official banner of the Symposium in 2013

At the symposium clinicians discussed the rise of the antibiotic resistance. According to the data presented, approximately 40 % of the acute bacterial infections resolve spontaneously. Acute bacterial rhinosinusitis develops as a secondary infection, which results from sinus obstruction, following acute viral upper respiratory infection (URI). Only 0.2-2% of the viral URIs are estimated to be complicated by bacterial rhinosinusitis. (1), (5)

The book Recent Advances in Rhinosinusitis and Nasal Polyposis was developed. It included the Proceedings of the Symposium. (Fig. 2) (1), (5)



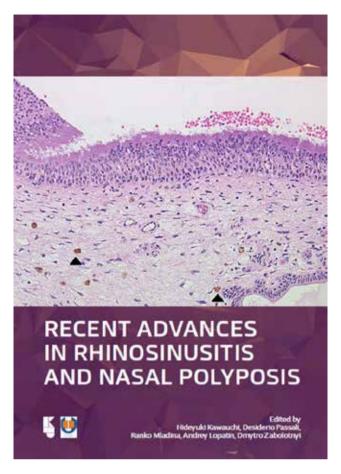


Fig. 2. Proceedings of the 7th International Symposium on Recent Advances in Rhinosinusitis and Nasal Polyposis. October 4-6, 2013, Matsue city, Shimane, Japan

The 8th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Panama, Republic of Panama in the period 21–24.10.2015. President was Dr. Amarilis Meléndez MD. Symposium was organized by the Nasal polyposis consensus group. The international consensus statement on Allergy and Rhinology: Rhinosinusitis, reached at the symposium, was brought into a scientific article. (1)

The 9th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Kuala Lumpur, Malaysia in the period 21-23.11.2016. President was Dr. Balwant Singh Gendeh, MD. The scientific event was organized by the Department of Otorhinolaryngology and Head and Neck Surgery. Renowned clinicians discussed the measures which can be undertaken to fight the rising antibiotic resistance. (1), (6) Several possibilities were mentioned:

- More information for the patients;
- To teach the health-care professionals;
- To change the attitude towards prescription;
- Alternative therapies

Authors discussed one therapeutic way of the Bacteriotherapy – administration by nasal spray of common commensal bacteria, which produce bacteriocins and other inhibitory substances, such as lactic and butyric acid, hydrogen peroxide, etc. The latter keep the threshold of the pathogens low. Some pediatric patients are less colonized



Fig. 3. Moments from the symposium in 2016 (photo by Shahiddan Saidi)



by the α -Hemolytic Streptococcus strains. They have lower pathogens inhibitory activity as well. α -Hemolytic Streptococcus strains are eligible for a replacement therapy. On Fig. 3 and Fig. 4 moments of the symposium can be observed. (1), (6), (7)



Fig. 4. Moments from the symposium in 2016

According to University Kebangsaan Malaysia (UKM) – The national university of Malaysia, Vice-Chancellor Prof. Datuk Noor Azlan Ghazali,

the scientific event provided "a platform to share knowledge on best practices, emerging technologies, innovations and new surgical techniques in the treatment of chronic rhinosinusitis." Internationally renowned professors held the scientific programme which included: live cadaveric dissection demonstrations, expert panel forums and scientific paper presentations. They were an excellent opportunity for participants to be updated with the latest information in rhinosinusitis and polyposis. The scientific event brought together more than 200 participants and 50 international speakers from Italy, United Kingdom, India, Greece and other countries around the world. (8)

The 10th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Manila, Philippines in the period 30.11-02.12.2017, under the theme: "Love the Nose II". President was Dr. Gil Vicente, MD. Venue was Manila hotel, Philippines. Parallel with the Symposium, the 61st Annual convention of the Philippine society of Otolaryngology – Head and Neck surgery was held. According to the organizers on the official Facebook page of the Philippine society of Otolaryngology, "The 10th ISRNP will be the venue for exchange of the latest ideas, tech-

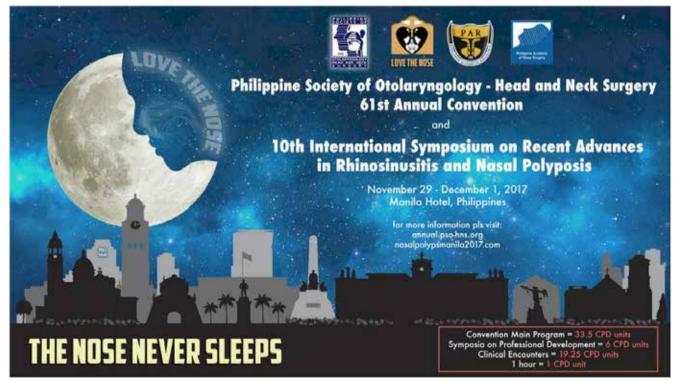


Fig. 5. Official banner of the Symposium in 2017



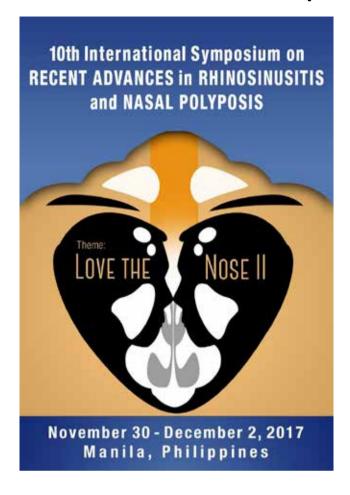
Fig. 6. Official poster of the Symposium in 2017

nology and researches concerning rhinosinusitis, nasal polyps, allergic and non-allergic rhinitis as well as other rhinologic problems. The Philippine Academy of Rhinology and Philippine Academy of Sleep Surgery have worked together to provide a robust scientific program which will also include important topics in the field of Sleep disorders." (9)

On Fig. 5 the official banner of the symposium is presented. On Fig.6, the official poster of the event can be seen.

Specialists at the symposium discussed Obstructive sleep apnea and snoring syndrome (OSAS), olfaction, occupational rhinitis, aesthetic surgeries. (1)

The 11th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Bangalore, India in the period 9–11.11.2018. The moto of the symposium was "A breath of fresh air". The venue was NIMHANS Convention center, Bangalore, India. The symposium was organized under the Aegis of the Association of Otolaryngologists of Bangalore (AOB). On Fig. 7 the official poster of the scientific event can be observed. (1)



The 12th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Brasilia, Brazil in the period 30–31.10.2019. The venue of the symposium was CICB – Centro Internacional de Convenções de Brasília. The 49th Congress of the Brazilian association of Otorhinolaryngology and cervico-facial surgery was organized, parallel with the symposium. (1)

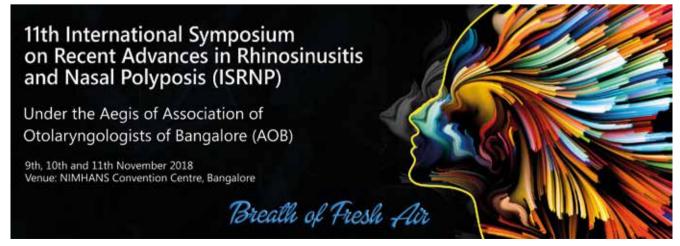


Fig. 7. Official poster of the Symposium in 2018

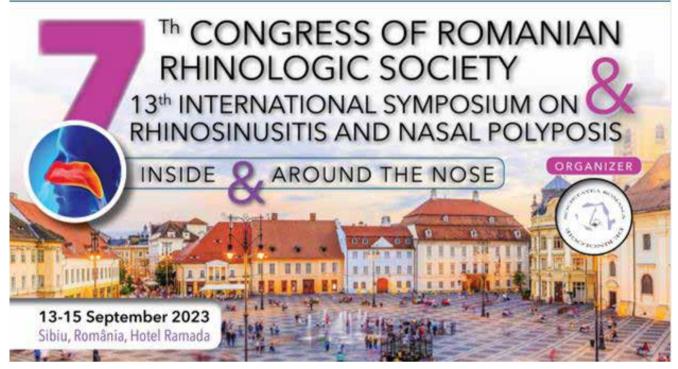


Fig. 8. Official banner of the Symposium in 2023

The 13th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis was held in Sibiu, Romania during the period 13–15.09.2023. The symposium was organized together with the 7th Congress of Romania rhinologic society. The moto of the scientific events was Inside & Around the nose. President of the 13th International Symposium on Rhinosinusitis and Nasal Polyposis was Prof. Dr. Codrut Sarafoleanu, MD, PhD. President of 7th Congress of Romanian Rhinologic Society was Prof. Dr. Magdalena Chirila MD, PhD. (10)

The 14th International symposium on Recent advances in Rhinosinusitis and Nasal polyposis is planned to be held in Varna, Bulgaria in September 2024.

Conclusions

Rhino-sinu-nasal pathology is directly related to the quality of life of patients affected. Therefore, clinicians should continue working in the field, and investigating the root causes of the disorders. More attention is to be brought on the allergic etiology, often main cause of the nasal pathologies. 3

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