

## Seventh course in ent surgery at “Trakia” hospital: 10 years cochlear implantation center in Stara Zagora

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In Stara Zagora, in the period 30.03-01.04.23, the 7th course in otosurgery was held, organized by Assoc. Prof. Petar Rouev, head of the ENT department at Trakia Hospital. The seventh course in otosurgery was held under the sign of the 10th anniversary of the first cochlear implantation in Stara Zagora by the team of Assoc. Prof. Dr. Petar Rouev and the German specialist Prof. Dr. Stefan Dazert from the Ruhr University in Bochum, Germany. With the support of Prof. Stefan Dazert, in 2013, the first out-of-town Center for Cochlear Implantation, called the “Thracian Center for Cochlear Implantation”, was opened at Trakia Hospital. Another guest of the course is Prof. Dr. Assen Koitschev from Olga Hospital, Stuttgart, Germany. The two professors are constant partners of Associate Professor Dr. Petar Rouev in all otosurgery courses held so far by Trakia Hospital in Stara Zagora. Otosurgery courses in Stara Zagora are held once a every second year. The beginning was made in 2011, and the first cochlear implantation was done 2 years later, when Associate Professor Dr. Rouev and Prof. Dr. Stefan

Dazert placed a cochlear implant on an elderly man, achieving a qualitative restoration of his hearing. The main topics during the 7th course in otosurgery were again related to novelties in otosurgery. On March 31, through a video bridge from the ENT operating room at the Trakia Center Hospital, a two-way connection was established with the Hristo Tanev Hall in the Stara Zagora Park Hotel, where the course participants had the opportunity not only to observe the operations, but also to listen to the comments from the operating theater with the opportunity to ask questions and also comment in real time.

The seventh course in otosurgery, organized by Trakia Hospital, started with record attendance and was officially opened on 30.03.23 at Park Hotel Stara Zagora. More than 50 doctors from all over the country came to participate in the course. Assoc. Prof. Dr. Angel Dandov (Sofia), Prof. Dr. Stefan Lolov (Sofia), Dr. Borislav Milev (Sofia), Assoc. Prof. Hristo Zlatanov (Sofia), Dr. Dimitar Chatalbashev (Plovdiv), Prof. Mario Milkov (Varna).

The main organizer of the course - Associate Professor Petar Rouev officially opened the course with a welcome to all participants and lecturers. „On behalf of Trakia Hospital and on my own behalf, I want to thank you for coming to this course, which is the 7th in a row for us. Our main goal is to train young colleagues, and I am glad that our 10-year efforts are yielding results - this is the most attended course of all that we have organized so far over the years,“ said Prof. Petar Rouev.



The course participants were also welcomed by the deputy rector for project activities of the University of Thrace in Stara Zagora, Assoc. Prof. Dr. Emil Slavov. He congratulated the participants on behalf of the rector of the educational institution Prof. Dobri Yarkov, emphasizing that he was impressed by the tradition of holding this course for 10 years, imposing high standards in the work of ENT specialists. „I am happy for the good relationship between Trakia Hospital, Trakia University and the scientific communities in the country and abroad, who meet as researchers and practitioners in the field of ENT diseases. It is wonderful that young colleagues manage to increase their competences through this course. In this difficult time, Assoc. Professor Petar Rouev managed to organize an event at an extremely high level, including the presence of guests from abroad. Therefore, the course has an extremely high value for us as a university as well.“ Prof. Dr. Stefan Dazert opened the course on his own behalf and noted that after the COVID-19 pandemic we have the opportunity to be together again and it is a pleasure for him to be in Stara Zagora again.



„As every second year we gather and I am glad that every time I see new, young faces who join this course to learn new things not only theoretically but also practically“, said Prof. Dr. Assen Koitshev. According to him, the otosurgery course in Stara Zagora is a very important initiative for a country like Bulgaria. „It is important that we have more than one cochlear implant center in our country so that families who need this special therapy can receive it,“ he pointed out.

The seventh course in otosurgery in Stara Zagora went down in history as the most attended specialized event of all previous editions organized in the last 10 years by Assoc. Prof. Dr. Petar Rouev and Trakia Hospital. More than 30 young doctors who currently specialize in otorhinolaryngology or have recently specialized in this specialty participated in the three-day course program. Many routine colleagues who follow the novelties presented by the organizers also came to Stara Zagora.

The main focus of the course this time too was live surgery. From the operating room of the ENT clinic in Trakia Hospital - Center, the participants observed three operations, listening in real time to the comments of the operating doctor – Assoc. Prof. Petar Rouev and his consultants - Prof. Dr. Stefan Dazert and Prof. Dr. Assen Koitshev.



“Live” the doctors also demonstrated a high level of efficiency, as the first patient scheduled for surgery - for the placement of a BoneBridge type auditory implant - had to be postponed for another. Instead, a 7-year-old child from Sliven was urgently operated on, whose parents sought medical help at that moment at Trakia Hospital. “Together with my German colleagues, we assessed that the child’s condition was urgent and decided to operate on him, showing the course of the operation “live” to the participants of the course,” explained Assoc. Prof. Petar Rouev. The child suffered from mastoiditis - an acute inflammation of the cellular system of the middle ear. In the past, mastoiditis was often fatal due to the lack of antibiotics and was one of the causes of inflammation of the meninges in children. The operation demonstrated opening of the cells of the mastoid process and evacuation of the pus collection from the child’s middle ear. “The inflammatory process was quite advanced and it’s good that we were able to operate on it in time,” said Dr. Rouev.



As part of the course, Dr. Rouev also operated on a patient with otosclerosis - a condition that is inherited and is associated with ossification of the auditory ossicles. In this case, the patient is a 32-year-old man, whose father was also operated on by Prof. Rouev for the same disease some time ago. “The ossification was very large and this created difficulties in placing the titanium prosthesis with which we replaced his third auditory ossicle,” explained Dr. Rouev.

The third case is of a patient who was operated on many years ago on the occasion of a similar acute inflammation as in the child. “His post-operative cavity was causing problems and it had to be filled with artificial bone,” said Dr. Rouev.

The seventh course in otosurgery at Trakia Hospital

will also be remembered for the series of interesting lectures by colleagues who were guests in previous editions of the event. The lecture of the anatomist Assoc. Prof. Dr. Angel Dandov from the Medical University in Sofia on the anatomy of the middle ear caused many comments and questions. With great interest, the lectures of Dr. Dimitar Chatalbashev, a freelance anesthesiologist from Plovdiv, gave a lecture on the peculiarities of anesthesia in patients undergoing otosurgical interventions. The famous radiologist and imaging diagnostician, Dr. Borislav Milev, d.m. presented a new methodology for proving endolymphatic hydrops - Meniere’s disease, which causes episodes of vertigo and hearing loss.

“Our guest speakers also presented lectures on chronic otitis, on certification of otosurgical interventions and in particular on cochlear implantations, and very interesting clinical cases were presented. The surprise of our course was Dr. Vanyo Vezirov, who deals with 3D-printing and had made models of the temporal bone, delivering an extremely interesting lecture about the possibilities of 3D-printing in modern medicine,” says Assoc. Prof. Dr. Rouev. During the course, the book “Otosurgery” authored by Assoc. Prof. Dr. Petar Rouev and Dr. med. Svetoslav Botev was also presented, and each of the participants in the course received it as a gift. “It describes all our operative techniques that we have demonstrated and I am convinced that it will serve as a very good teaching aid for our young colleagues,” concluded Dr. Rouev.

On the last day of the course - April 1, the conference hall gathered many of the children and adult patients who have had cochlear implantations in the Trakia Hospital over the past 10 years. More than 15 children and their parents came to the meeting, who gratefully greeted the auditory-speech rehabilitator Fani Mihailova. She showed them excerpts from the videos of the first lessons in which the children learned to speak after receiving the cochlear implants. Today, the grown-up little patients are already fully socialized and happily took pictures with Fani Mihailova - their first teacher of recognizing sounds, reading and speaking.

The extraordinary „School for Parents of Children with Cochlear Implants“ was organized by hearing-speech rehabilitator Dr. Fani Mihailova from the ENT Department of Trakia Hospital, who with extreme patience, love and professionalism for months and years has been adjusting the children’s

implants, she conducted specialized sessions with each one of them to master each sound, the pronunciation of each word, so that today they can hear, understand, talk and communicate freely.

„Today, a very large percentage of these children who were born with practical deafness are studying in mainstream schools, some have already graduated and been accepted into universities, thanks to cochlear implants and the auditory speech therapy that has been carried out,“ said Dr. Fanny Mihailova.

About 1 in 1000 newborn children in our country is born with impaired hearing. The earlier treatment begins for these children, the greater the chance that they will learn to hear, speak and generally socialize and live a fulfilling life. The best solution offered by modern medicine for children with deafness is the placement of a cochlear implant. For 10 years now, Trakia Hospital, on the initiative of Assoc. Dr. Petar Rouev, d.m. supports the work of the country's first non-capital Center for Cochlear Implantation.

„Today - 10 years later, the feeling of seeing how much all these children have succeeded, how much they can do and how much they have changed, is extremely exciting,“ shared Dr. Mihailova. All the young patients were initially fitted with hearing aids for about 6 months. From an early age, Dr. Fani Mihailova began working with them to stage the sounds, after which the cochlear implants were placed. „Every month, for about a year and a half, every child came for adjustments, and in the meantime we conducted lessons on the production of sounds, then we learned to read, write. When they went to school, I helped them learn their lessons and write their homework,“ Dr. Fani Mihailova recalls the long journey with tears of excitement. Thanks to cochlear implants and working with them, with the help of their parents, the children were able to speak.

Guests of the „Parenting School“ were also several adult patients who also had cochlear implants placed at the Trakia Hospital - among them the first operated patient 10 years ago - a man who still hears well and is grateful for what was done treatment.

In her presentation to parents and patients, Dr. Fani Mihailova presented the achievements of children in development over the past 10 years, her profes-

sional books, which she wrote thanks to working with children and which can be of help to parents. Fani Mihailova also presented the sign language cards for teaching young babies, useful books on the subject, which she has translated into Bulgarian for the benefit of hearing-speech rehabilitators throughout the country.

Parents watched with interest excerpts from videos of their children's first lessons when they were learning to say the first sounds. Thus, the now grown children and their parents were able to see how much they had achieved compared to the beginning.

„I don't remember an event like this happening and being so excited. I saw that all my work was worth it, I saw how many children we helped, and all this gives me confidence that I should continue in this direction,“ said Dr. Fani Mihailova.

She currently works with 7 children with cochlear implants aged 3 to 11 years. Most of the children operated on are from the Stara Zagora region, but there are also children from Veliko Tarnovo, Gabrovo, Gorna Oryahovitsa, Velinograd, Burgas, Varna and many other cities in the country who seek the help of the Trakia Center for Cochlear Implants at Trakia Hospital.

One of the mothers, Marina Kalcheva, who has become a representative of ARDUS - the organization of parents of hearing impaired children, presented her presentation on the organization's work.

The „School for Parents“ also presented the latest technologies, through which parents of children with cochlear implants will be able to contact the doctors of the Center and which will allow the settings to be made remotely in the future.

While the presentations for their parents were going on in the big hall, the more than 15 children present at the meeting got involved in a pleasant activity - making souvenirs, Easter eggs from a multi-colored mosaic, under the guidance of animator Tony Mateva. Finally, the children presented their parents with the souvenirs they had personally made, and the event ended with a common photo for memory. This is how the seventh course in otolaryngology at Trakia Hospital, Stara Zagora ended, with the hope that what the young colleagues learned will be applied in practice.

#### **Reviewer of the article:**

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