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Interview with Dr. Raimundo Nonato about Narcolepsy and Insomnia



NN: Could you introduce yourself and talk about your professional career?

Dr. Raimundo Nonato: I started in sleep medicine about 30 years ago when I was a resident in neurology in the service of Professor Maurice, in Strasbourg, and there I met a person who would become my friend, Professor Jean, who

worked with sleep since the 1970s. I began to develop a taste for sleep medicine gradually and started working on it at a time when not only in Brazil but especially in the city of Brasilia the sleep matter was unknown. I studied with European teachers, American teachers, Canadian teachers, and could bring many of them to Brasilia to join us in congresses. I got my master's degree in sleep medicine in 1999 at the University of Brasilia, where I became a professor. I also earned a doctorate degree while in France in 2004. Over the past years, my professional activity has been concentrated almost exclusively within the sleep area of medicine.

NN: Narcolepsy is a disease not well known or easily identifiable by general population, different from insomnia or any other sleep disorders. In many cases, it may be confused with sudden fatigue and even laziness. How to identify the pathological condition and what symptoms should make the patient search for a physician?

Dr. Raimundo Nonato: Narcolepsy is a disease that affects a very small portion of the population, about 200 patients out of 100,000. The major problem is the impact it has on the general quality of life (personal, professional and academic), being that the patient with narcolepsy is going to search for a doctor without knowing what they exactly have. There are English studies showing a delay of up to eight years in the diagnosis of narcolepsy. During this period, what basically happens is professional failure or academic failure, which sometimes marks their lives indelibly. Narcolepsy flagships are sleep attacks. Attacks are beyond reproach, irresistible attacks, which occur during the daily life of patients, and that are beyond their control. They may also produce a curious motor symptom, which is loss of muscle tone during moments of joy, when they fall to the ground, awake but without any strength, without tonus in the muscles. These patients may also have hallucinations at bedtime and wake up in the middle of the night paralyzed. A major problem is how to deal with these patients after diagnosis, since we do not have resources necessary to make a definitive diagnosis. We cannot, for example, provide a dosage of certain substances that are missing in the patient with narcolepsy. This type of procedure is very expensive, so we still need lots of research and more dedication to the treatment of that disease.

n spite of affecting a small number of people, narcolepsy is a sleep disorder that greatly impacts the social lives of patients. Early detection and knowledge is essential to improve patients' quality of life.

and Insomnia

Dr. Raimundo Nonato, one of the main practitioners of sleep medicine in Brazil, discusses this and other issues in the interview below, granted to the Neurovirtual in his office in Brasilia.

NN: How is the evolution of the disease? Are there severe forms of such disease? How is the diagnosis made?

Dr. Raimundo Nonato: The evolution of narcolepsy, when it comes accompanied by the cataplectic phenomenon, i.e., lack of muscle tone, may take place in two ways. The literature reports that excessive sleepiness, those sleep attacks, will remain with the patient during all his/her life. However, as time goes by and with retirement, for example, the patient seems to begin dealing with these sleep attacks in a better way, because sleeping is no longer a major problem. Diagnosis in Brazil is made primarily through clinical data and then a test chart called *multiple sleep latency test* is requested, where the patient is given five opportunities to sleep during the day and we observe how long it takes for them to sleep in each of these opportunities, which happen every two hours. The patient with narcolepsy often has an average time, which we call latency, to sleep, which takes less than eight minutes. Some of them take less than three minutes.

NN: You have published many articles about insomnia. Recent information shows that Brazil has set a record in the sale of sleeping medicines. In some regions, sleeping pills are only after painkillers. What is the risk of self-medication for this type of problem? When does it turn into a serious disease?

Dr. Raimundo Nonato: Insomnia is a major public health problem and one of the most frequent in medicine. Frequently, sleeping badly or not sleeping at all is immediately attributed by the patient to a personal issue, and they rarely think this is a disease at first sight. This is the reason for not looking for treatment at the time they should do it. Other times, they take medicine thinking that they will feel fine and sleep as they used to. The problem is that there is an activation of brain regions during sleep that control sleeping and wakefulness simultaneously. In other words, those neurons that produce sleep and neurons that produce vigilance work in the brain of a patient with insomnia during the night, at the same time. As wakefulness is fundamental to survive, the brain ends up being dominated by that at the expense of sleep, and the person does not sleep. The issue is that the vast majority of medications commonly used for the treatment of insomnia works on a region of the brain that produces sleep and that is healthy. The defective region is the region that produces wakefulness when it should not. And for treating of this region, there aren't many drugs. However, we count on cognitive behavioral therapy specifically designed to deal with these problems of rehabilitation of the wakefulness area, because the patient, as they spend time with insomnia, develops bad habits related to sleep and causes the problem to endure. Sometimes we are obliged to prescribe medication in association with cognitive behavioral therapy once therapy does not act immediately. Nevertheless, when therapy is effective, we are able to remove such medication.

"Healthy sleep, healthy heart" was the theme of the XXV Annual Congress of the **Spanish Sleep Society**

ealth professionals from several parts of the world met in April in the city of Santander, Spain to participate in the XXV Congress of the Spanish Sleep Society. The event had as its central theme the



relationship between the quantity and quality of sleep with cardiovascular health, such as heart risk in the treatment of sleep apnea, among other relevant topics. In addition to the

lectures with renowned professionals from Spain and other countries, there were also debates around recent or future clinical guidelines and topical issues linked to sleep medicine, mediated by specialists, with the active participation of health professionals who attended the event.

During the congress, Sleepvirtual presented its line of equipment with the latest technology. Highlighted was the BWMini PSG, a lightweight and compact amplifier designed for Type 3 HST, upgradeable to Type 2 HST and Type 1 Laboratorial Polysomnography, and also upgradeable to EEG Ambulatory. Another item presented was the BWIII PSG Plus, which allows the user to perform both EEG and Polysomnography from the same hardware and software platform, using equipment that can be easily transported from one location to another.

"Sleepvirtual takes part in the main events and discussions on sleep medicine around the world and Spain has had international projection in the subjects

related to the theme. Participating in this event enables us to be updated with the main available studies and thus offers the best alternative for the diagnosis," stated Marcelo Belli, Sales Manager of the company in Mexico.



69th Congress of the American Academy of **Neurology**, Boston, **USA**

n its 69th edition, the American Academy of Neurology Annual Meeting took place in Boston, Massachusetts, USA this year, with several lectures and plenary sessions that brought together experts from around the world. In addition to the scientific discussions and presentation of research



studies, the participants were able to participate in discussions using real cases.

The congress was an opportunity for the presentation of interesting seminars on neuroscience, including unpublished studies by international researchers. Additionally, companies in the medical device industries were able to present their latest products for increasingly accurate diagnostics.

Neurovirtual featured their BWIII Plus LTM and ICU

monitoring device, which includes a powerful 50-channel EEG amplifier, an ergonomic cart, Sony IPELA PTZ highend camera, and a touchscreen computer packaged as a single device, designed to make it more comfortable and efficient to use.

During the event, participants were also able to learn about Neurovirtual's latest routine EEG product, the BWIII EEG 34 Channel system, which was launched in April 2017. This new device improves on the now discontinued BWII routine EEG with additional channels, a higher sampling rate, better resolution, and bedside impedance check.

Felipe Lerida, Clinical Specialist, and Sergio Solis,

Account Manager, represented Neurovirtual at the event, highlighting the enhancements to quality and experience enjoyed by customers of Neurovirtual.



NEWS

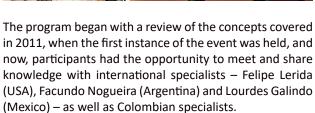


III Technical Training in **Polysomnography Colombia**

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Among the highlighted subjects covered by guest, for diagnostics and treatment of children, Dr. Lourdes Galindo spoke on the evolution and monitoring of the respiratory system in children during polysomnography, and when and why to use oxygen on minors during the procedure.





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Dr. Facundo Nogueira spoke on, among other subjects, comparisons between polygraphy and polysomnography, using data from studies for when to use each procedure.

Felipe Lerida, the clinical specialist representing Neurovirtual, spoke of the new sleep scores for adults, and participated, together with Dr. Lourdes, in a work group on the connection of polysomnography diagnostics with sleep studies.

The main objective of the update meeting, which had great participation in Colombia, was to support the knowledge of specialists in the sleep medicine area, from PSG technicians to doctors who specialize in the subject. Sleepvirtual, in addition to offering cutting edge equipment for diagnosis, which is more accurate each day, also invests in the sharing of studies in the area of sleep medicine throughout various countries in the world. "Our objective is to humanize diagnostics throughout the world, improving the quality of offered exams and consequently patients' lives. For this reason we are present at congresses and seminaries on sleep medicine, and we promote trainings like this one, which share the newest updates on sleep disruption diagnostics and treatment with specialists in the area," said Felipe Lerida, Sleepvirtual clinical specialist.





Among local guests, there were renowned specialists such as doctors Lina Tavera, Angelica Bazurto, Elida Dueñas , Karen Herrera, Sandra Zabala and Karen Parejo, who were able to lead participants through a current panorama in sleep medicine in Colombia, and who talked about what is being done today, and what provisions they have for the future, in addition to specific subjects such as narcolepsy and respiratory problems during sleep, based on recent studies.

Classes on the 10-20 system, polysomnography connection, qualification of sleep phases in children and adults, Fisher & Paykel, and the conferences themselves generated positive comments on the scientific and academic level, which national and international guests had when covering their respective subjects.



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Sleepvirtual at the 8th Canadian Sleep Society Conference

he 8th edition of the biennial conference of the CSS (Canadian Sleep Society) took place in Calgary, Canada this year. The event is known

as a quality scientific program that includes renowned spokespeople in the field of sleep medicine, symposiums, and presentations



of unpublished recent studies. The congress also presents the diagnostic and treatment industries with

the opportunity to showcase their latest products and services in state-of-the-art technology.

Ed Faria, CEO of Neurovirtual, attended the event and commented: *"Canada has been very prominent in the area of sleep studies and Sleepvirtual actively*

participates in CSS events not only to learn about the latest research, as well as to provide high-performance solutions for industry professionals".



Sleep Virtual takes part in 31st Annual Sleep Meeting in Boston

n the early part of June 2017, the 31st Annual Sleep Meeting was held in Boston, Massachusetts, USA, which was an annual meeting of the Associated Professional Sleep Societies (APSS) – a joint venture of the American Academy of Sleep Medicine and the Sleep Research Society. The traditional event focuses on evidence-based education, providing recent studies on the matter, extension courses and practical applications of the presented cases.



The SLEEP Meeting counted on the participation of specialists from around the world, among them

the Brazilian neurologist from Porto Alegre, Dr. Geraldo Rizzo, coordinator of the Moinhos de Vento sleep disorder center.

During the meeting, Sleepvirtual presented its cutting-edge equipment line, highlighting the BWMini

PSG, a light and compact amplifier designed for HST Type 3, upgradable to HST Type 2 and Laboratory Polysomnography Type 1, and upgradable as well to EEG Ambulatory Polysomnography.

Another piece of equipment that was presented was the BWII PSG Plus, which permits the user to perform both EEG and Polysomnography from the same hardware and software platform, and is equipment that can be transported easily from one place to another.

Clinical specialist Felipe Lerida and Ed

Faria, CEO of Sleepvirtual, represented the company at the 31st Annual Sleep Meeting. Ed underscored this event's high-level



research and focus on education, which promotes career development for its attendees.

CALENDAR OF EVENTS

Neurovirtual participates on average in 20 to 30 congresses and conferences in different countries around the globe. Taking our goal to humanize the diagnostic, we pride ourselves to be part of this community and be able to give our contribution to clinicians and patients.

Below you will find the list of events for 2017, where Neurovirtual will be presenting its solutions to make neurology and sleep diagnostic more human! We hope to see you there!



Contact us:

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