EDITORIAL

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Paradigm Shift for the DSM Dentist

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Three months ago, Dr. Audrey Yoon and a team of distinguished researchers published a paper in *SLEEP*[1] about growth modification in children suffering from sleep apnea. Their team made a presentation at the American Academy of Orthodontics meeting in April and to say that the topic was controversial among orthodontists is an understatement.[2]

The paper suggests an approach on how to treat younger patients. Critics affirm that the proposed protocol is based off weak scientific evidence.[3] If the critics are correct, the protocol can be worrisome as the approach suggests treatments that are irreversible. As such, some of the implications of this treatment are unknown at this time.

Most DSM dentists have very little knowledge about treating pediatric patients. Besides the extensive review made by pediatric dentist Jacy Stauffer in the *Journal of Dental Sleep Medicine*[4], there is little information directed to us and it seems most of the marketing materials we get on the topic rests on very little scientific evidence and more on random cases with few controls.

As my expertise is extremely limited in growth modification, the purpose of this editorial is not to comment about Dr. Yoon's paper[5] but rather, to explain what some of the critics have revealed: there is a need for more information on the topic of pediatric DSM and if anything, the paper has the merit of starting a conversation among sleep specialists. So, despite our minimal involvement at this time, should we be interested in the debate among orthodontists (and pediatric dentists)? We definitely should. Let's put this in context.

The Precision Medicine Initiative was launched during the State of the Union address in 2015.[6] The initiative is about giving patients treatments that are tailored to their specific conditions, not a one-size-fits-all for everyone. At that time, with advances in genetics, we could foresee a distant future where health outcomes would improve greatly. In 2023, with advances in wearable technologies and AI, we are on the precipice of this future. And it is now being shared with the general public as witnessed in the New York Time's list of bestsellers new book, Outlive by Peter Attia, MD.[7] In this book about living longer, the author talks about what he calls Medicine 3.0, which is, in fact, Precision Medicine with some emphasis on prevention (interestingly, a good part of the book is devoted to sleep). This book is timely for us as there is already a sense in the general health community that our health system, which heavily rests on curing diseases, is broken and there should be more emphasis put on preventing illness. It is obvious that the best possible treatment for a disease is to prevent that disease in the first place. This is so obvious that it seems the only way to go in the future. However, this approach implies a lot of change for us regarding how we should screen, diagnose and treat DSM patients.

So, at what age should we start looking for signs of sleep-disordered breathing in our patients? This question is one of the reasons we need to closely follow the debate. According to a recent paper, as many as 10% of the orthodontic population could be suffering from sleep-disordered breathing.[8] Eventually, this population will age and some will become adults with sleep-disordered breathing. Just this fact alone could result in a lot of patients to follow. This begs another question - as technology improves, and as the available treatments and the way we follow patients changes as well, how will we manage not only the patients, but relationships with sleep physicians and different dental specialties? Who will do what? Dr. Yoon's paper is just the start of a long journey...

Fortunately, the situation was predicted by the president of the American Academy of Dental Sleep Medicine (AADSM), Dr. Mitchell Levine. Early last year, he convened a committee of experts from various backgrounds with diverse opinions to define the future scope of DSM. Dr. Levine has defined the boundaries of this ambitious mandate and some results should hopefully be made available to our members in 2024. I applaud the vision and the proactive position of the AADSM as well as the decision of its Board of Directors to support Dr. Levine in this endeavor.

CITATION

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