

2nd Edition of International Summit on Diabetes, Endocrinology and Metabolic Disorders July 21-22, 2026 | Vienna, Austria



**Adel Djebbar¹, A. Yahil, MD. Benziane¹, A.
Taazibt¹, C. Belhadi¹, M. Bensaleh², M.
Chanegriha¹**

*¹ Department of Medicine, Mother and Child Army Hospital, Algiers, Algeria
² Department of Endocrinology, Central Army Hospital, Algiers, Algeria*

Prevalence and Associated Factors of Obstructive Sleep Apnea Syndrome in Patients with Turner Syndrome: A Prospective Pilot Study

Turner syndrome is associated with several factors that may increase the risk of obstructive sleep apnea syndrome (OSAS), including craniofacial abnormalities, ear-nose-throat features, overweight, obesity, and endocrine comorbidities. The aim of this prospective pilot study was to assess the frequency of OSAS and to identify associated clinical, morphological, and therapeutic factors in patients followed for Turner syndrome. Seven patients were recruited from the Department of Medicine at the Mother and Child Army Hospital and the Endocrinology Department of the Central Army Hospital. Anthropometric data were collected, and all patients underwent an ENT examination, including assessment of tonsillar size using the Brodsky score and oropharyngeal anatomy using the Mallampati score. Craniofacial morphology was evaluated by cephalometric analysis. Clinical screening was performed using the Pediatric Sleep Questionnaire, with a positivity threshold of 0.33. Type 3 overnight respiratory polygraphy was performed during hospitalization, with manual interpretation according to AASM recommendations. The mean age was 13.86 ± 7.14 years. Craniofacial abnormalities were observed in all patients, with a predominance of skeletal Class II patterns. Descriptive analysis showed positive correlations between the apnea-hypopnea index and body mass index, the PSQ score, and the duration of growth hormone therapy. These findings suggest a high frequency of OSAS in patients with Turner syndrome and support systematic screening combining validated questionnaires, ENT assessment, morphological evaluation, and sleep recording. Larger multicenter studies are needed to confirm these preliminary findings and to clarify the potential role of growth hormone therapy in OSAS severity.

Keywords: Turner syndrome; OSAS; polygraphy; screening; growth hormone; craniofacial

Biography

Dr. Adel Djebbar is a pulmonologist at the Department of Medicine, Mother and Child Army Hospital, Algiers, Algeria. His clinical and academic work focuses on respiratory diseases, with a particular interest in sleep-related breathing disorders, especially in the pediatric population. His areas of interest also include the relationship between obstructive sleep apnea, obesity, and endocrine or genetic disorders.