

Peculiarities of obstructive sleep apnea in pediatric patients

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INTRODUCTION

Obstructive sleep apnea (OSA) in children is a condition characterized by episodes of complete and reversible upper airway obstruction during sleep. The prevalence of this condition among the pediatric population is 1-5%.

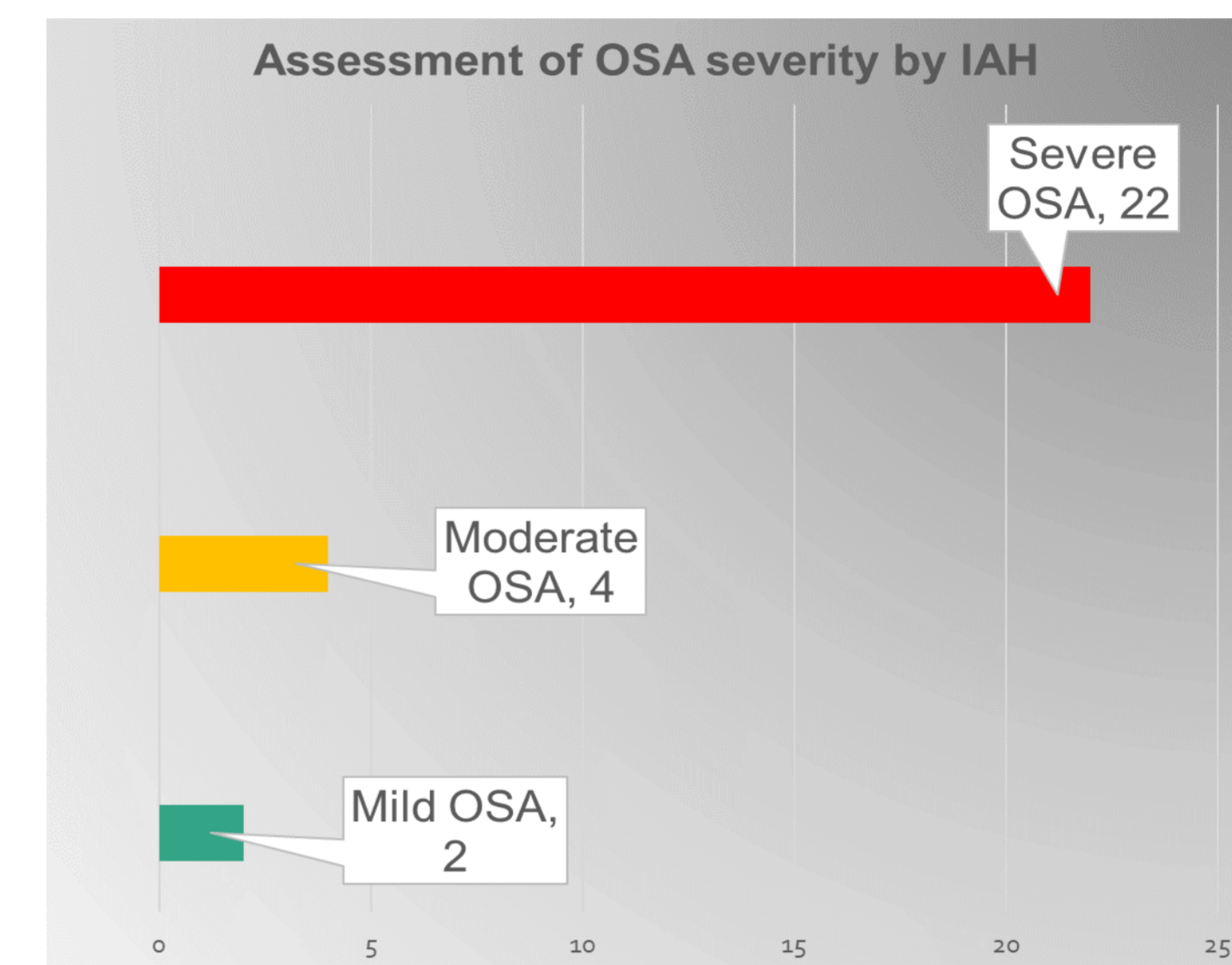
Its etiology is multifactorial, but the most frequently incriminated factors are: adenotonsillar hypertrophy and obesity. OSA has become widely recognized in recent decades as being significantly involved in pediatric morbidity.

Early diagnosis of OSA is important, and the prompt institution of therapy prevents complications due to a long evolution of the condition.

The therapy addressed to the cause improves the symptoms, the cognitive-behavioral function, the growth rate as well as the quality of life.

Through the sleep questionnaire, OSA was identified in over 2/3 of the cases

The sleep studies certified OSA in all evaluated children. OSA was severe in 82% of cases.

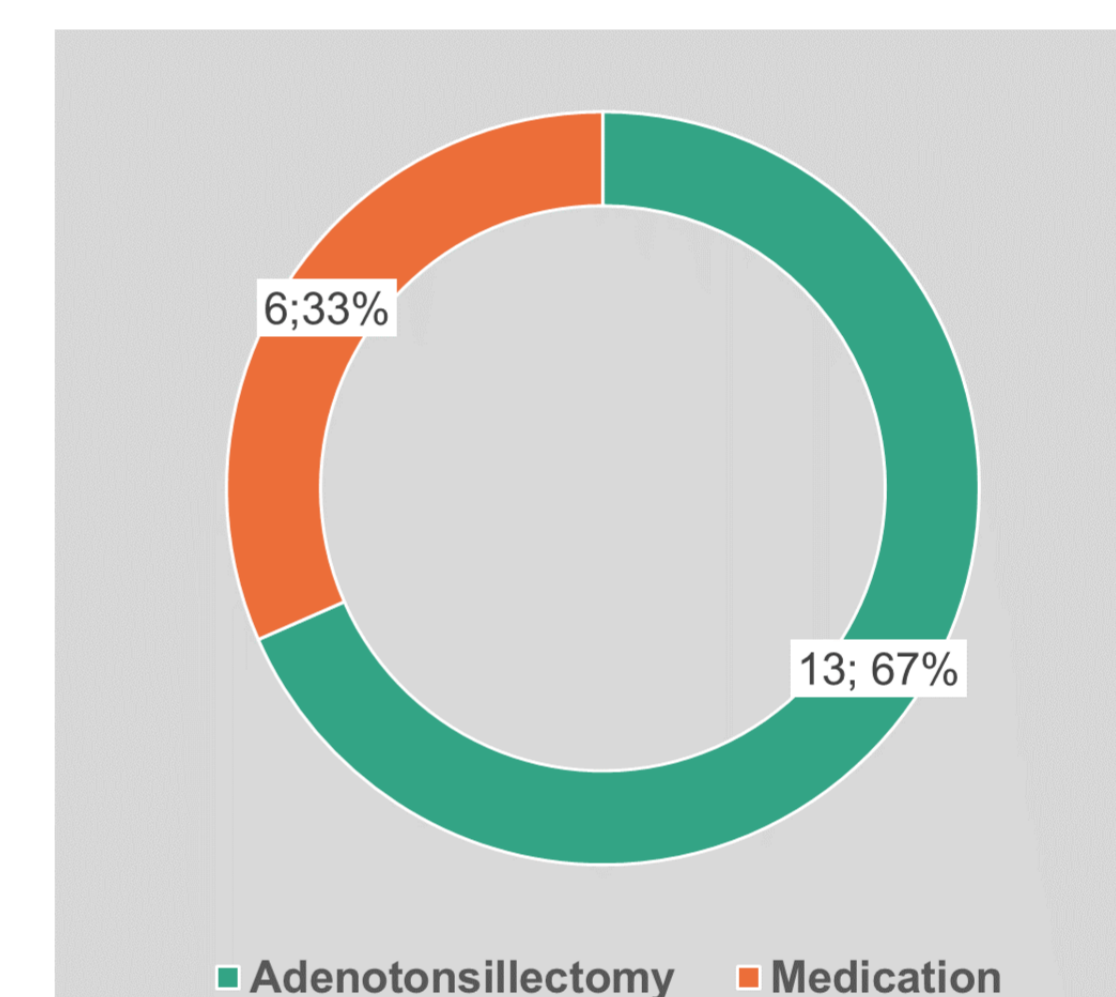


METHOD

We conducted a retrospective study on a group of 28 patients hospitalized with suspected sleep apnea in the Pediatric Clinical Department I of the "Louis Turcanu" Children's Emergency Clinical Hospital in Timisoara over a 12-month period.

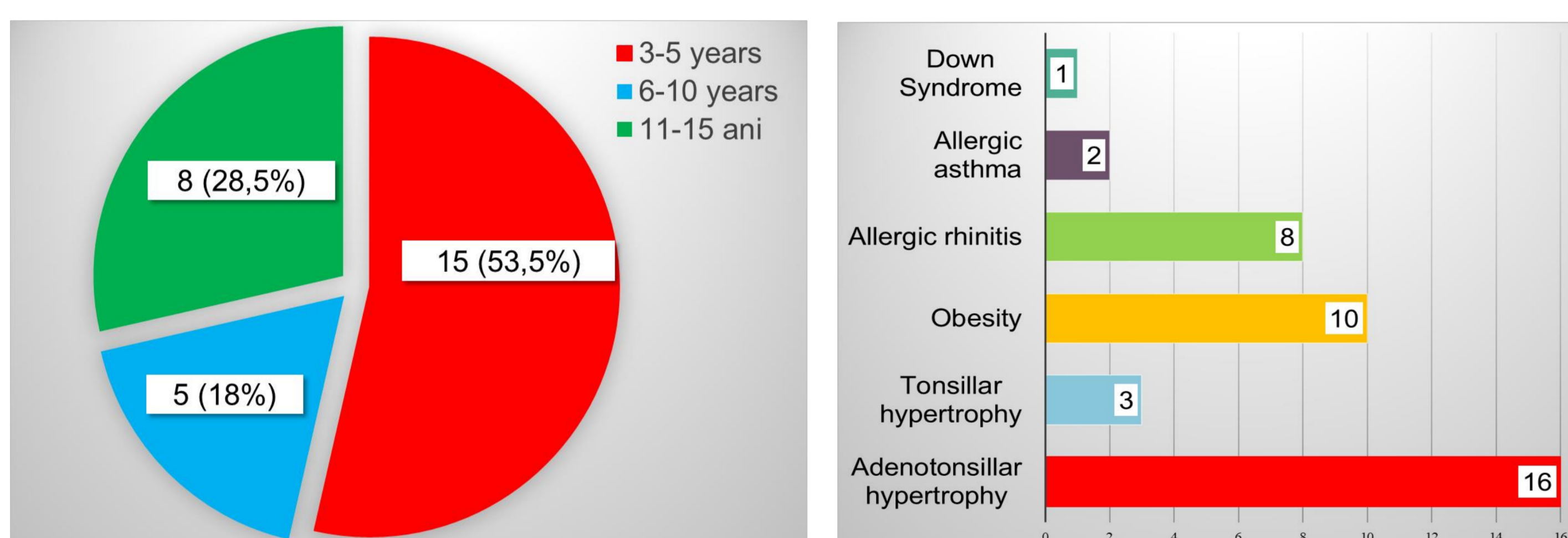
The cases were evaluated through anamnesis, clinical examination, sleep questionnaires, paraclinical explorations (biological, imaging) and sleep polygraphy.

The recommended therapy (hygienic-dietary, medicinal, surgical) was addressed to the cause of OSA and adapted to its severity.

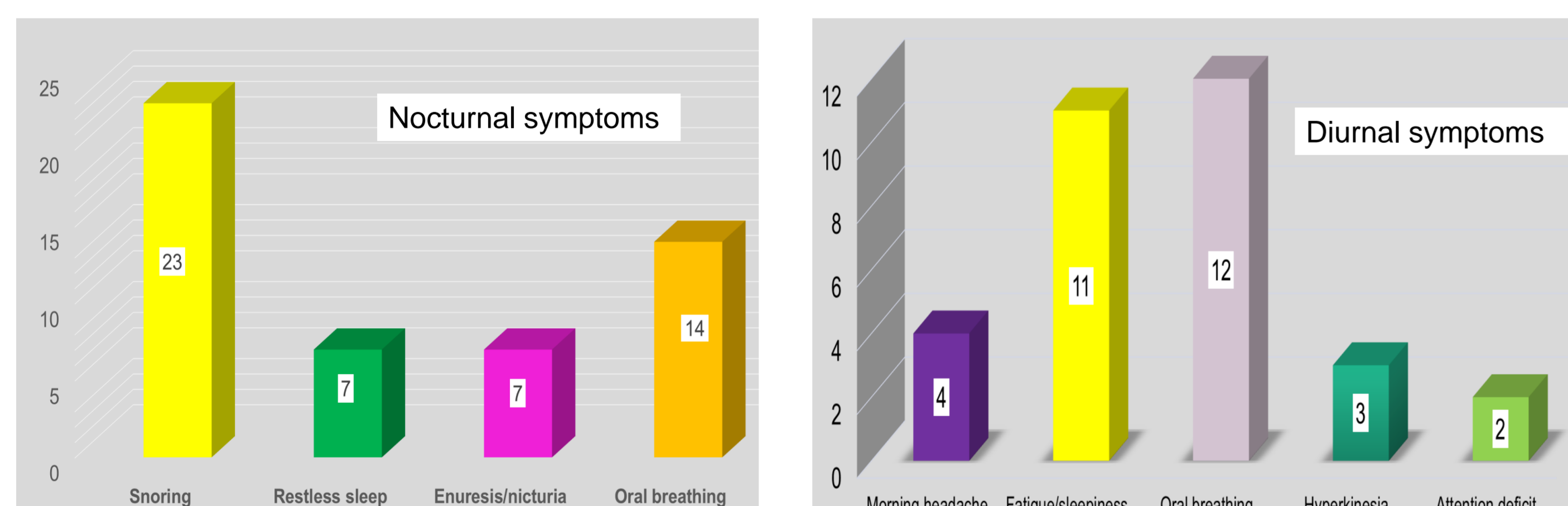


RESULTS

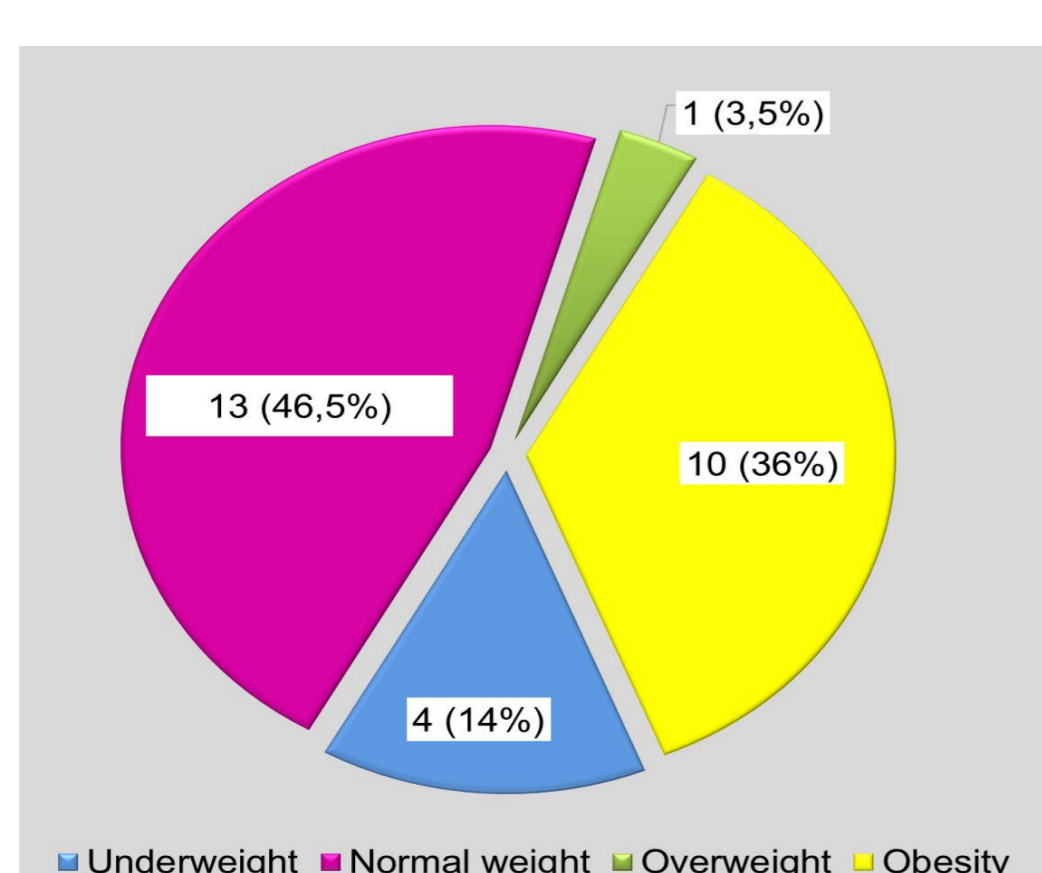
In the study, the predominance of boys (61%) and preschoolers was highlighted.



The main cause of obstructive sleep apnea was adenotonsillar hypertrophy, followed by obesity and allergic rhinitis.



The most frequent symptoms of OSA were snoring in sleep, daytime and nighttime oral breathing and daytime fatigue.



1/3 of the patients were overweight and obese.

CONCLUSIONS

- The sleep study and questionnaires are essential in specifying the diagnosis and severity of OSA in children.
- The medical treatment of pediatric OSA is complex and includes hygienic-dietary measures (sleep hygiene, weight loss, etc.) and pathogenic therapy (anti-inflammatory/anti-allergic medication, etc.).
- Adenotonsillectomy remains the surgical therapy of choice in OSA due to adenotonsillar hypertrophy.
- The prevention of complications (metabolic, cardio-vascular, etc.) of OSA in children is a priority.

REFERENCES

- Eber E, Midulla F. (2021). Paediatric Respiratory Medicine. 2nd edition. ERS handbook
Simonds AK, de Backer W.2012. Respiratory Sleep Medicine. ERS handbook
Bassetti C, Dogas Z, Peigneux P. (2016) ESRS European Sleep Medicine Textbook.

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