

European Outcomes of growth hormone therapy in the obstructive sleep apnea parameters of Prader–Willi syndrome patients: a systematic review

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Abstract

Purpose

Prader–Willi syndrome is a serious genetic condition, capable of causing endocrinological imbalance, which has as one of its main treatments the growth hormone therapy. However, this therapy still causes some uncertainty concerning its effects on the respiratory parameters of those patients, especially in cases of obstructive sleep apnea, therefore, presenting a need for the analysis of the relationship between the therapy and the otolaryngologic condition.

Methods

A systematic review following the PRISMA model was developed, with searches for keywords made in the databases PubMed (MEDLINE), Scopus, and Web of Science and registration in the PROSPERO platform (CRD42023404250).

Results

Three randomized controlled trials were considered eligible for inclusion in the review. None of the studies demonstrated statistically significant modifications in the obstructive sleep apnea parameters of Prader–Willi patients related to the growth hormone administration.

Conclusions

Growth hormone therapy is safe for Prader–Willi syndrome patients when analyzing their obstructive sleep apnea parameters.

Availability of data and materials

Not applicable.

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Contributions

GRF had the idea and developed the preliminary research for the article. GRF, JLBS and GCB performed the literature search and data analysis and drafted the work. PHG and MDB oriented the work. GRF, JLBS, GCB, PHG and MDB critically revised the work.

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Ethics declarations

Conflict of interest

No conflict of interest is reported by the authors.

Ethics approval and consent to participate

Not applicable.

Consent for publication

An informed consent and a consent to publish were obtained from each of the participants.

Research involving human participants and/or animals

Not applicable.

Informed consent

Not applicable.

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