



# Comparative Study: Objective and Subjective Analysis in Late Postoperative Adenotonsilectomy

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## INTRODUCTION

Evaluation of the impact of adenotonsillectomy surgery in the patient quality of life in the long term period using two complementary methods: Peak Inspiratory Flow (PIF) and Obstructive Sleep Apnea- 18 (OSA-18) questionnaire.

## METHODS

This was an observational retrospective study characterized by comparing the same population from November 2018 to November 2019. The sample consisted of volunteers aged between 3 and 16 years that underwent to adenotonsillectomy surgery. Included criteria were: grade III or more palatine tonsil hyperplasia, pharyngeal tonsil hyperplasia of at least 50% on cavum x-ray and/or presence of recurrent tonsillitis.

Patients were evaluated through two complementary tools: PIF and OSA-18.



PIF

- 1.SLEEP DISTURBANCE
- 2.PHYSICAL SUFFERING
- 3.EMOTIONAL DISTRESS
- 4.DAYTIME PROBLEMS
- 5.CARIGIVER CONCERN

OSA-18  
5 DOMAINS

The first one is a device used to measure the degree of nasal respiratory capacity, evaluating the permeability of the nearby airways in a objective way and the second tool was a questionnaire, thus a subjective method that focuses on the impact of obstructive sleep in most diverse activities.

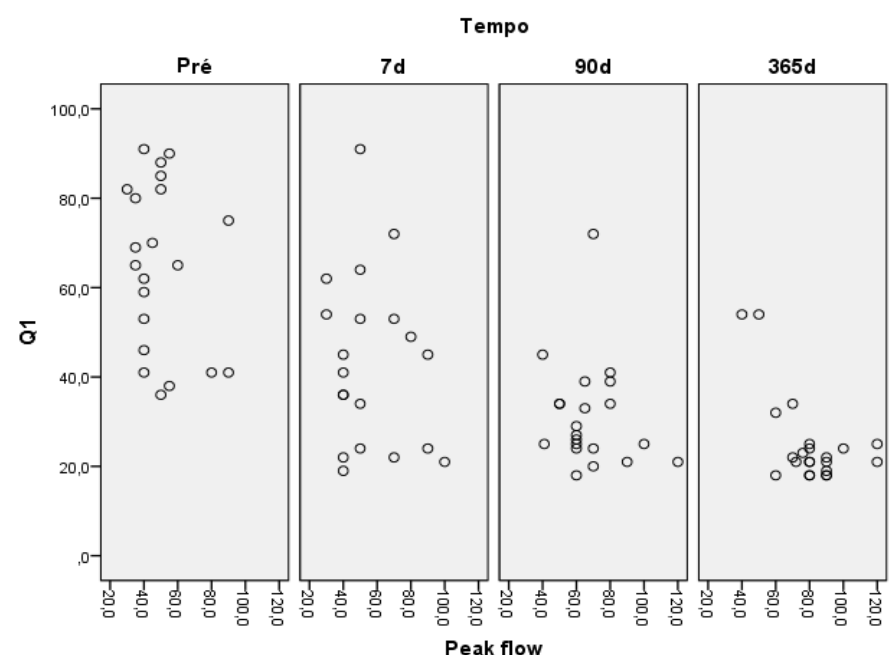
They were compared with each other using the Friedman test, a non parametric statistic test used to combine the results of two differents tools when applied to the same person at different times.

## RESULTS

Twenty-two patients were evaluated with PIF and OSA-18. Both were applied preoperatively, 30 days postoperatively, 90 days and finally 12 months after surgery.

In the questionnaire, the more ponctuation you get, the higher are the chances for you to have sleep problems, so bad quality sleeping. On the other hand, the PIF shows the opposite: the higher the ponctuation you get, the better your nasal capacity is.

Regardless of the time the surgery showed that while the pontuation in the OSA-18 got lower the pontuation in the PIF got higher.



## CONCLUSIONS

Therefore, when the results obtained with the two tools were compared to each other with Friedman test, it showed a notorious optimistic statistic “p” around 5%. This statistic supported the hypothesis that the surgical choice is affirmed as an essential tool to increase patients’ quality of life, even after 1 year surgery.

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