

# Comparison Peak Nasal Inspiratory Flow and Life Questionnaires in the Evaluation of Functional Nasal Surgeries

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## INTRODUCTION

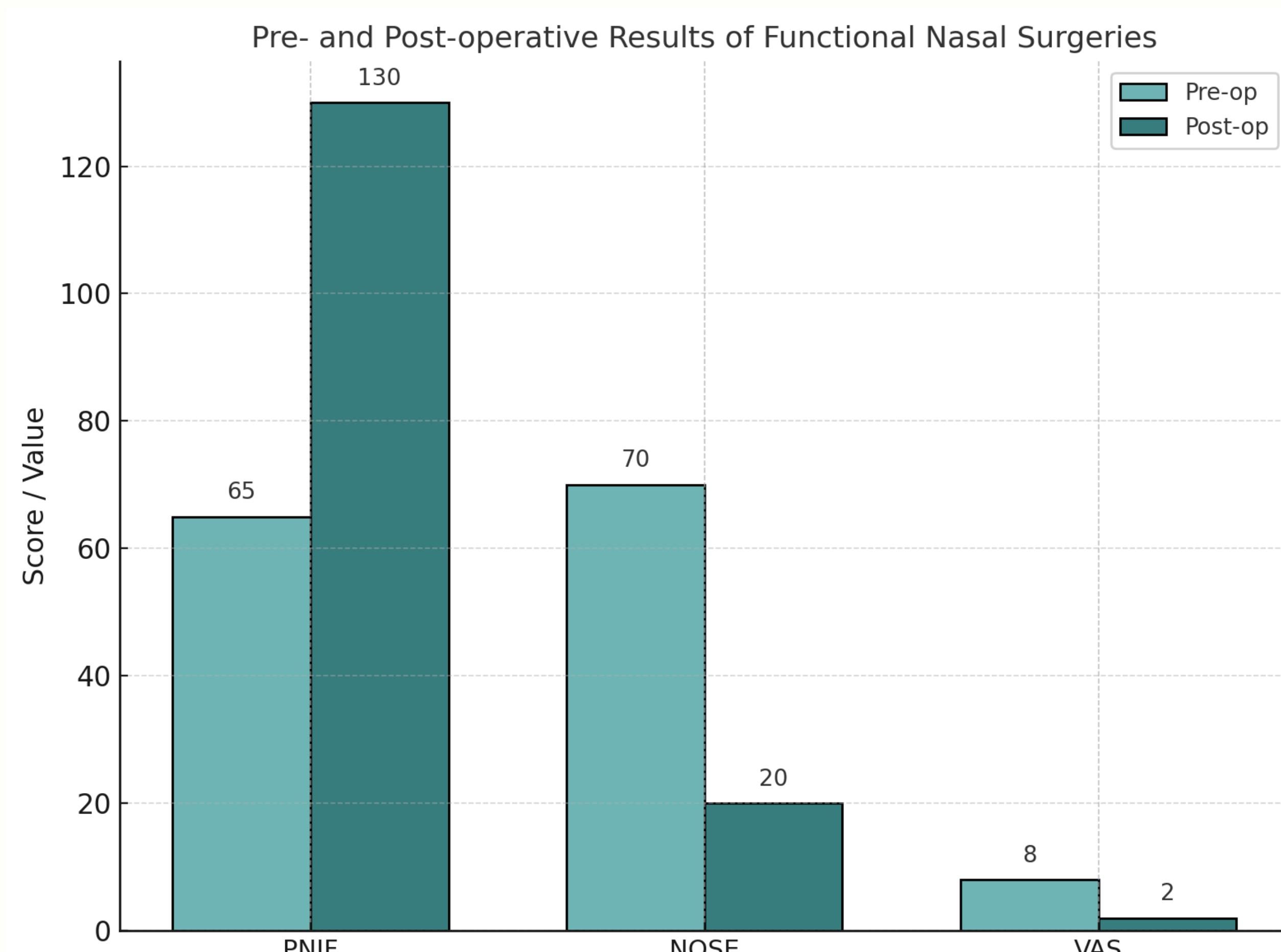
The objective of this study was to compare postoperative outcomes of functional nasal surgeries using two evaluation methods: Peak Nasal Inspiratory Flow (PNIF) questionnaires of quality of live (NOSE and Visual Analogue Scale).

## METHODOLOGY

A prospective cohort study was conducted, evaluating 65 adult patients (ages 18–54) presenting with nasal obstruction and diagnosed with septal deviation and turbinate hypertrophy. These patients underwent only functional nasal surgeries, without the need for sinus interventions, between 2019 and 2023, when they were assessed using Peak Nasal Inspiratory Flow (PNIF) and the NOSE and VAS questionnaires. The surgeries were performed by the same surgical team at a university hospital in Brazil, PNIF and the NOSE questionnaires were administered by medical students from the Faculty of Medical and Health Sciences of the Pontifical Catholic University of São Paulo. Assessments were conducted preoperatively and six months postoperatively.

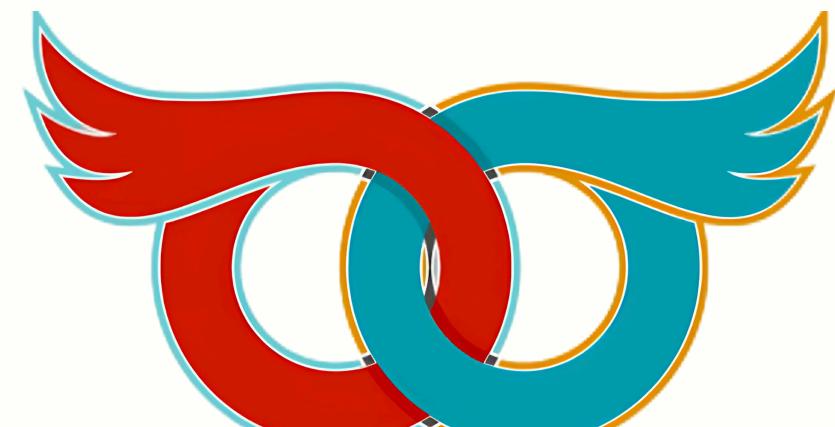
## RESULT

For functional nasal surgeries, the preoperative median PNIF value was 65 (range 30–120), which increased to 130 (range 120–140) in the late postoperative period, demonstrating a 100% improvement in the preoperative results. The NOSE scale results showed a preoperative median score of 70 (range 25–100) and a six-month postoperative median score of 20 (range 0–50), reflecting a 74% improvement (range 20%–100%) between preoperative and late postoperative periods. The VAS questionnaire results revealed a preoperative median score of 8 (range 2–10) and a late postoperative median score of 2 (range 0–4), indicating a 75% improvement (range 33%–100%).



## CONCLUSION

PNIF proved to be an effective and easy-to-perform objective method for evaluating outcomes of functional nasal surgeries. The NOSE and VAS questionnaires showed synergistic results in assessing patient improvement or deterioration, suggesting concordance in qualitative postoperative evaluations



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