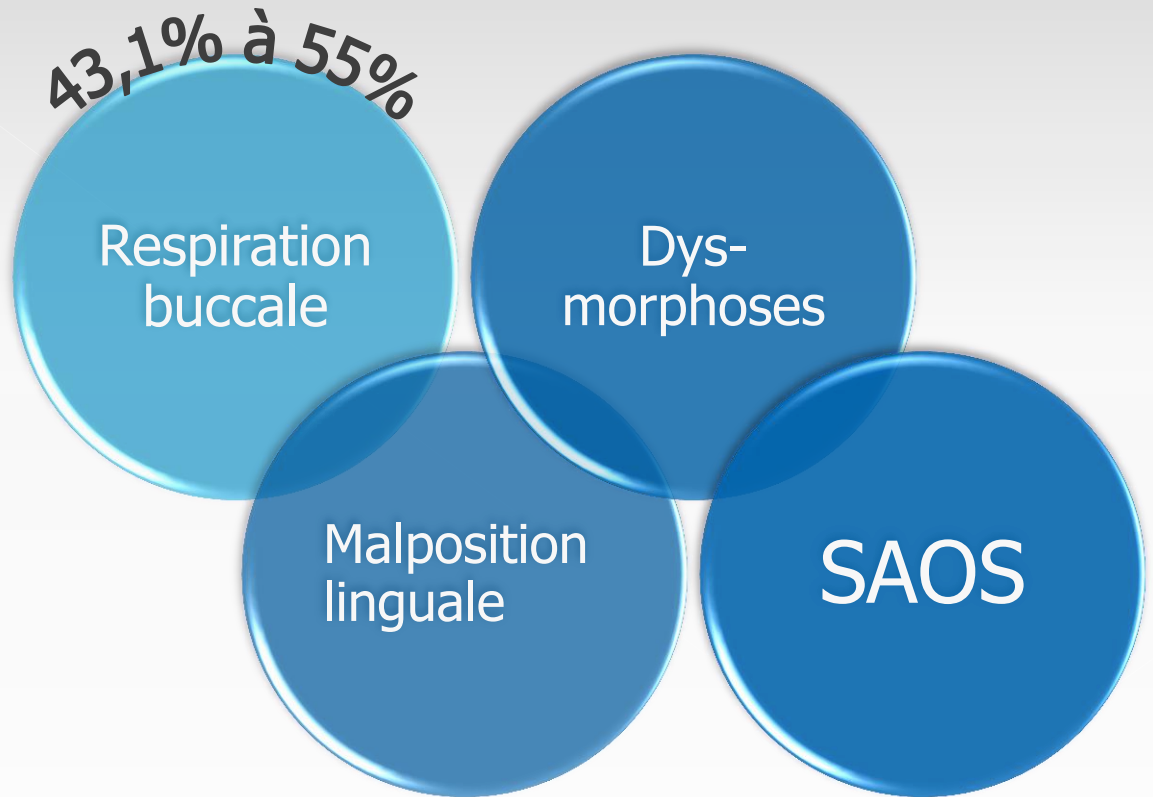


Rééducation des fonctions orofaciales

Prise en charge orthophonique



Contexte myofonctionnel



Mouth breathing, “nasal disuse,” and pediatric sleep-disordered breathing

Seo-Young Lee · Christian Guilleminault ·
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Received: 9 December 2014 / Revised: 6 February 2015 / Accepted: 25 February 2015
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Abstract

Background Adenotonsillectomy (T&A) may not completely eliminate sleep-disordered breathing (SDB), and residual SDB can result in progressive worsening of abnormal breathing during sleep. Persistence of mouth breathing post-T&As plays a role in progressive worsening through an increase of upper airway resistance during sleep with secondary impact on orofacial growth.

Methods Retrospective study on non-overweight and non-syndromic prepubertal children with SDB treated by T&A with pre- and post-surgery clinical and polysomnographic (PSG) evaluations including systematic monitoring of mouth breathing (initial cohort). All children with mouth breathing were then referred for myofunctional treatment (MFT), with clinical follow-up 6 months later and PSG 1 year post-surgery. Only a limited subgroup followed the recommendations to undergo MFT with subsequent PSG (follow-up subgroup).

Results Sixty-four prepubertal children meeting inclusion criteria for the initial cohort were investigated. There was significant symptomatic improvement in all children post-T&A, but 26 children had residual SDB with an AHI > 1.5 events/hour and 35 children (including the previous 26) had evidence of “mouth breathing” during sleep as defined [minimum of

44 % and a maximum of 100 % of total sleep time, mean 69 ± 11 % “mouth breather” subgroup and mean 4 ± 3.9 %, range 0 and 10.3 % “non-mouth breathers”]. Eighteen children (follow-up cohort), all in the “mouth breathing” group, were investigated at 1 year follow-up with only nine having undergone 6 months of MFT. The non-MFT subjects were significantly worse than the MFT-treated cohort. MFT led to normalization of clinical and PSG findings.

Conclusion Assessment of mouth breathing during sleep should be systematically performed post-T&A and the persistence of mouth breathing should be treated with MFT.

Keyword Sleep-disordered breathing · Adenotonsillectomy · Mouth breathing · Myofunctional treatment · Apnea-hypopnea index worsening

Introduction

Adenotonsillectomy (T&A) improves but often does not completely eliminate pediatric obstructive sleep apnea

Evaluation du contexte myofonctionnel

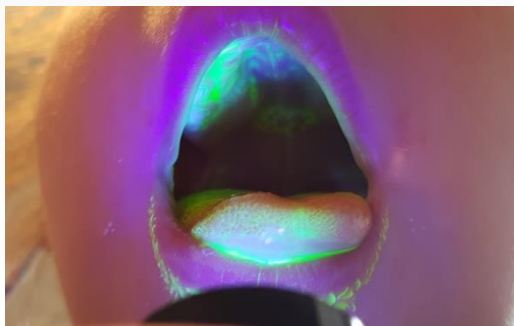
Observations cliniques

Faciès

Cavité buccale

Système manducateur

Posture



Examen fonctionnel

Pattern de respiration

Mouchage

Sensibilité linguale

Position de repos
linguale/labiale/dentaire

Pattern de déglutition

Pattern de mastication

Phonation

Prise en charge : efficacité

MYOFUNCTIONAL THERAPY TO TREAT OSA: REVIEW AND META-ANALYSIS

Myofunctional Therapy to Treat Obstructive Sleep Apnea: A Systematic Review and Meta-analysis

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Objective: To systematically review the literature for articles evaluating myofunctional therapy (MT) as treatment for obstructive sleep apnea (OSA) in children and adults and to perform a meta-analysis on the polysomnographic, snoring, and sleepiness data.

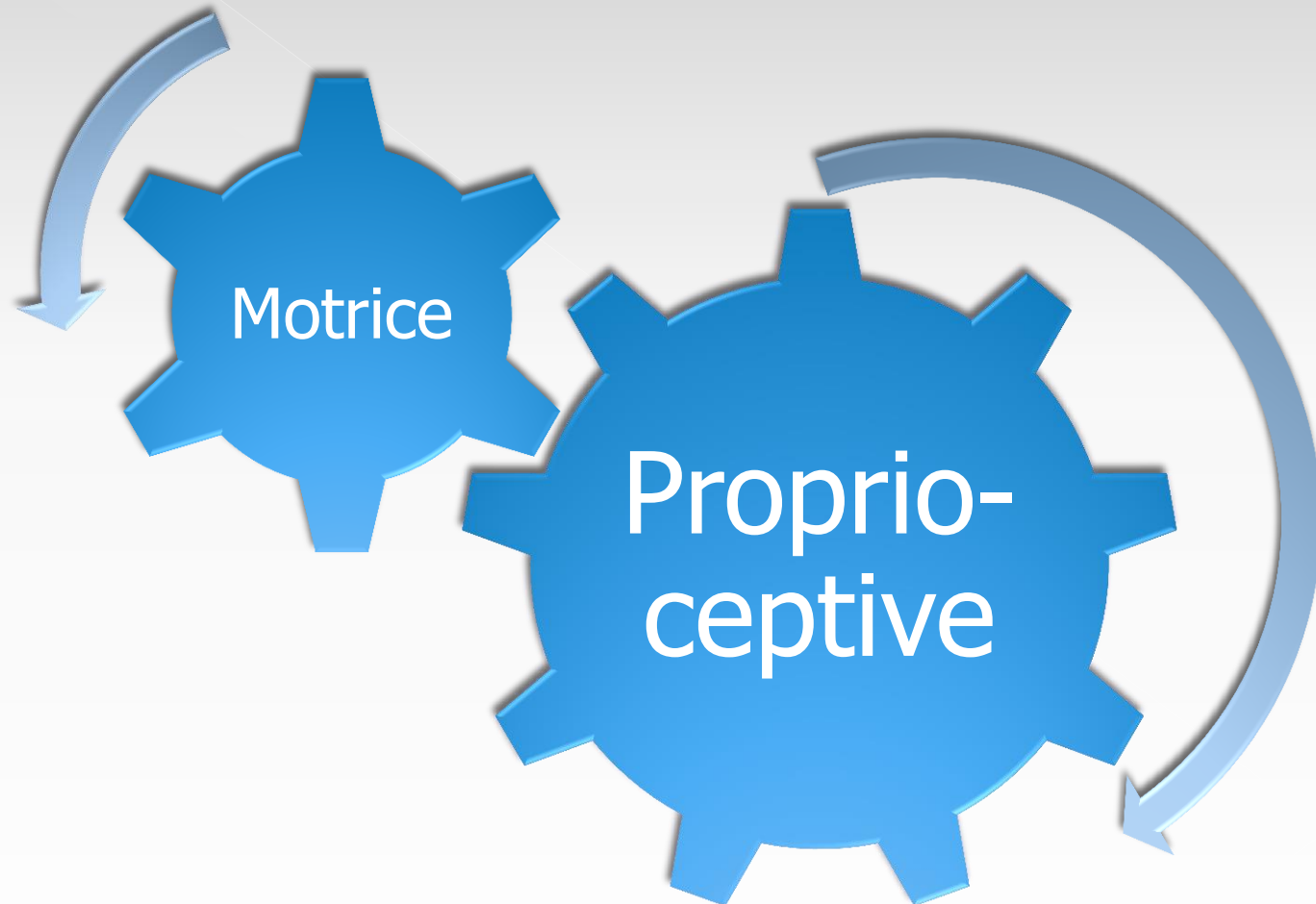
Data Sources: Web of Science, Scopus, MEDLINE, and The Cochrane Library.

Review Methods: The searches were performed through June 18, 2014. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement was followed.

Results: Nine adult studies (120 patients) reported polysomnography, snoring, and/or sleepiness outcomes. The pre- and post-MT apnea-hypopnea indices (AHI) decreased from a mean \pm standard deviation ($M \pm SD$) of $24.5 \pm 14.3/h$ to $12.3 \pm 11.8/h$, mean difference (MD) -14.26 [95% confidence interval (CI) $-20.98, -7.54$], $P < 0.0001$. Lowest oxygen saturations improved from $83.9 \pm 6.0\%$ to $86.6 \pm 7.3\%$, MD 4.19 (95% CI $1.85, 6.54$), $P = 0.0005$. Polysomnography snoring decreased from $14.05 \pm 4.89\%$ to $3.87 \pm 4.12\%$ of total sleep time, $P < 0.001$, and snoring decreased in all three studies reporting subjective outcomes. Epworth Sleepiness Scale decreased from 14.8 ± 3.5 to 8.2 ± 4.1 . Two pediatric studies (25 patients) reported outcomes. In the first study of 14 children, the AHI decreased from $4.87 \pm 3.0/h$ to $1.84 \pm 3.2/h$, $P = 0.004$. The second study evaluated children who were cured of OSA after adenotonsillectomy and palatal expansion, and found that 11 patients who continued MT remained cured (AHI $0.5 \pm 0.4/h$), whereas 13 controls had recurrent OSA (AHI $5.3 \pm 1.5/h$) after 4 y.

Conclusion: Current literature demonstrates that myofunctional therapy decreases apnea-hypopnea index by approximately 50% in adults and 62% in children. Lowest oxygen saturations, snoring, and sleepiness outcomes improve in adults. Myofunctional therapy could serve as an adjunct to other obstructive sleep apnea treatments.

Prise en charge : quel type ?



Prise en charge : trame

- Mouchage – hygiène nasale
- Respiration nasale – souffle
- Praxies labiales, linguales et vélares

frontiers in
NEUROLOGY

HYPOTHESIS AND THEORY ARTICLE

published: 22 January 2013
doi: 10.3389/fneur.2012.00184



Pediatric obstructive sleep apnea and the critical role of oral-facial growth: evidences

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Prise en charge : trame

- ⦿ Proprioception globale
- ⦿ Proprioception linguale
- ⦿ Position linguale repos
- ⦿ Déglutition
- ⦿ Mastication
- ⦿ Articulation

Educateur fonctionnel



MERCI DE VOTRE ATTENTION

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