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Hygienist-Led Orofacial Myofunctional Care for Children: Case-Finding, Motivation, and Early Intervention in an Independent Preventive Practice

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1 **IDENTIFY** — Case-finding at routine preventive visits → 2 **MOTIVATE** — Overcome cost & dental mistrust → 3 **COORDINATE** — Refer for diagnosis & frenum release → 4 **INITIATE OMT** — Individualized home exercises → 5 **MONITOR** — Serial records & family report

BACKGROUND

- Orofacial myofunctional disorders (OMDs) in children — mouth breathing, restrictive frenula, lip incompetence, abnormal occlusal wear, sleep-disordered breathing — reflect an oral–systemic link central to prevention, yet are often undetected in routine care.
- Mouth breathing is associated with altered craniofacial growth and malocclusion, including anterior open bite, posterior crossbite, and arch narrowing.[1,2]
- Myofunctional therapy can reduce sleep-apnea severity as an adjunct (pooled apnea–hypopnea index reduction ≈ 50% in adults, ≈ 62% in children).[3]
- OMT is rarely offered as a hygienist-led service; cost and dental mistrust can delay definitive care.

AIM / RESEARCH QUESTION

Can a dental hygienist–led pathway within an independent preventive clinic identify OMDs, motivate families toward definitive care, coordinate frenum release, and initiate early OMT?

METHODS

- Setting: an independent, hygienist-owned preventive clinic (Canada).
- Across repeated preventive visits, a standardized assessment evaluated oral hygiene, frenum attachment, occlusion & incisal wear, oral-motor function, and sleep-related history; supplemented by family report; documented with study models and serial photographs.
- Findings guided individualized education, home myofunctional exercises, and coordinated referral.
- Scope: hygienist screening / case-finding and referral for diagnosis; OMT delivered in interprofessional collaboration — diagnosis is made by the appropriate health professional.[4]

CLINICAL FIGURES

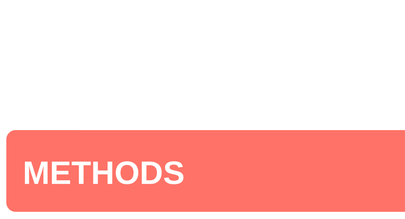

Fig 1. Intraoral frontal — Case 1 (anterior open bite).

Fig 2. Tongue-tip “spot” training (Case 1).

RESULTS — TWO PEDIATRIC CASES

Case 1 · 11-year-old

- Attended the hygiene clinic; exam revealed caries and an abscess; definitive care had been delayed by cost and dental mistrust.
- Rapport and sustained motivation led the family to pursue pediatric dental treatment, including caries management and a maxillary labial frenectomy; the frenum settled without discomfort.
- Assessment also identified anterior open bite, mouth-breathing signs, and forward head posture.
- Sleep symptoms were denied by child and parents; a co-sleeping sibling reported nightly snoring and bruxism — prompting OMT.
- Over six weeks, individualized exercises (tongue-tip “spot” training, then balloon blowing) were paired with a sibling-kept sleep diary; despite variable adherence, the sibling later reported the child no longer snored (family-reported).

Case 2 · Toddler

- Speech delay, a prior lingual frenum release, a tight maxillary labial frenum, and reduced labial strength.
- With interprofessional input, guided through a home program of straw use and bubble blowing.
- Progressed from being unable to blow out a candle to performing the motion successfully.

CONCLUSIONS

- A hygienist-led pathway can surface undetected OMDs and sleep-disordered breathing, overcome access and trust barriers through sustained motivation, and initiate early myofunctional intervention with early reported functional gains.
- This suggests a replicable, prevention-focused role for dental hygienists in childhood oral–systemic health.

LIMITATIONS

- Two-case report from a single clinic; no control group.
- Short follow-up; key outcomes (snoring, function) are family-reported, not polysomnography-confirmed.
- Variable home adherence; findings are preliminary and hypothesis-generating.

Conflict of Interest: The author owns the independent preventive practice where the cases were managed; no other conflicts of interest are declared.

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Ethics: Written informed consent for clinical documentation, photography, and educational/scientific presentation was obtained from the participants’ parents/guardians. As a report of routine clinical care, research ethics board approval was not required.

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Credentials: Hwanhee Kim — Bachelor of Dental Hygiene (Republic of Korea); Diploma in Dental Hygiene, University of Manitoba (Canada); Certificate in Adult Education, University of Michigan (USA). RDH licensed in British Columbia, Canada; Certified Orofacial Myologist (COM®) candidate, IAOM.

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