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Parental Considerations for Releasing Infant Lip Ties

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Introduction

The topic of tethered oral tissues and their impact on breastfeeding has been the subject of ongoing research and debate.[1-4] Despite new studies and efforts to clarify this once culturally accepted, centuries-old,[5,6] effective, and safe[7-11] treatment, infant frenectomy procedures have become increasingly controversial. A growing divide is forming among healthcare providers on ethical and procedural grounds,[12-14] and the controversy is intensifying alongside the influx of new research.[15-23]

Among tethered oral tissues, lip ties—relative to tongue ties—are less understood yet deserve our attention. Their anatomical deviations begin as early as embryonic development,[24] potentially leading to feeding and colic issues at birth and continuing as a multifaceted problem throughout life, as discussed in this paper.

A deeper understanding of lip tie-related dysfunction and its acceptance as a problem often accelerate when healthcare providers themselves struggle alongside their own children affected by lip ties. Whether it's a pediatrician whose infant's choking and weight gain issues were resolved with a simple lip tie revision, an ENT physician who had to physically restrain his toddler for oral hygiene due to a lip tie, or a pediatric dentist who was referred a toddler with a prescription to extract four healthy teeth because of a severe soft and hard tissue infection resulting from a lip tie trauma—these experiences highlight the significant impact of upper lip ties on health and well-being.

We should strive to understand the etiology of lip ties, treat them when necessary, or refer patients for proper evaluation by experienced providers. Over the past 25 years, I have observed several dozen examples of different lip tie functional problems among my patients, which I have organized into 12 categories.

1. Infant Feeding Problems

Short frenum length and low insertion have been implicated in upper lip flange difficulty.[25] Maxillary frenums are considered abnormal when they interfere with an infant's ability to flange the upper lip and achieve a successful latch or seal during breastfeeding.[26-28] Proper breastfeeding or bottle feeding requires the infant's lips to contribute significantly to creating an adequate seal for vacuum generation. This vacuum generation demands a 100% seal around the breast tissue or bottle nipple (Figure 1). If this seal is compromised—even slightly—due to factors such as a lip tie, suction fails,[29] milk transfer is likely to be disrupted,[30] and air may be ingested instead.

An air-filled stomach results in a shortage of calories, leading to frequent hunger pains and necessitating more frequent and longer feedings. This can contribute to weight loss in the infant[31-33] and sleep deprivation for both the baby and the parents. The medical urgency of infant weight loss and the psychological consequences of parental sleep deprivation are significant concerns.[34]

In response to this feeding crisis, many babies deviate from the optimal suckling mechanism, resorting to compensatory behaviors that can lead to a host of other problems. These may include biting the mother's nipple, directly damaging it, and damaging breast tissue due to incomplete milk drainage, which can affect the mother's milk supply.[35]

Continued incorrect suckling can cause some babies to develop muscular imbalances—described as "the wrong muscles getting stronger and the right muscles getting weaker." These compensatory issues can further interfere with successful breastfeeding.[36-40] The longer these compensations are left unaddressed, the more pronounced the muscular imbalances may become, potentially increasing the time, effort, and expense required for physical therapy or bodywork to rebalance associated muscles and nerves.

Regarding latch quality, there may be tell-tale signs observable during breastfeeding or bottle feeding. An educated professional can assess breastfeeding visually; however, since each nursing mother's anatomy, technique, milk supply, and the growing infant's needs are individualized and constantly changing, it presents a formidable challenge for clinicians without formal training to conduct a proper lactation assessment at the level of an International Board Certified Lactation Consultant (IBCLC).

Since oral restrictions may present as feeding dysfunction on the breast as well as the bottle, it is essential that each troubled infant be screened by a qualified lactation consultant for nursing problems, in addition to an evaluation of the patient's tethered oral tissues by an experienced provider. Developing an effective differential diagnosis for tethered oral tissue surgery requires including functional troubles of the nursing dyad (mother and baby). It is useful to consider both subjective and objective functional signs of nursing trouble, some of

Figure 1. Bottle feeding and breastfeeding share several of the same dysfunctions as they both require an excellent seal afforded by unrestricted lips.

which I have itemized below.[41,42]

Infant Feeding Problems Related to Lip Ties:

- **Discomfort Due to Hunger:** Poor latch may lead to reduced food intake.
- **Frequent Feedings:** Inefficiency leads to exhaustion and filling up of the stomach with air.
- **Long Feeding Times:** Poor seal results in poor suction and inadequate milk intake.
- **Weight Loss of Infant:** Poor intake quantity and overworking the baby.
- **Supplemental Feedings:** Need for formula, pumped, or donated breast milk.
- **Loss of Sleep for Infant:** Due to hunger and constant feeding.
- **Loss of Sleep for Parent:** Due to constant feeding and infant crying.
- **Pain to Mother:** Infant clamping, biting, nipple compression.
- **Mastitis:** Damage to milk ducts due to poor drainage of the mother's breasts.
- **Bleeding Nipples:** From clamping by a baby who cannot suckle correctly.
- **Infection of Breast Tissue:** Secondary to skin damage from clamping.
- **Reduction of Mother's Milk Supply:** Due to low drainage and pain.

2. Colic

Colic refers to an infant's physical reactions to sustained discomfort from bloating. Traditionally, colic is characterized by prolonged crying, clenched fists, and flexion of the hips, suggesting that these behaviors are related to abdominal discomfort—hence the term “colic,” derived from “kolikos,” the Greek word for colon.[43] Other manifestations include raising or pulling in the limbs, arching of the back,[44] a tight bloated tummy, excessive gas, and an overall unhappy demeanor (Figure 2).

Many parents dealing with infant nursing troubles report their baby's discomfort along with air intake noises, such as clicking sounds. Clicking is a sign of air ingestion by the nursing baby, also known as aerophagia or “air eating.”[45]

An uncomfortable baby is often an unhappy baby. Discomfort from aerophagia often occurs after feeds and is diagnosed by auscultation during feeding, the presence of colic-like symptoms afterward, and gastric distention immediately after feeding, which can be seen on flat plate X-rays showing an enlarged gastric bubble.[46] The increase in gastric pressure may overcome the lower esophageal sphincter pressure, causing

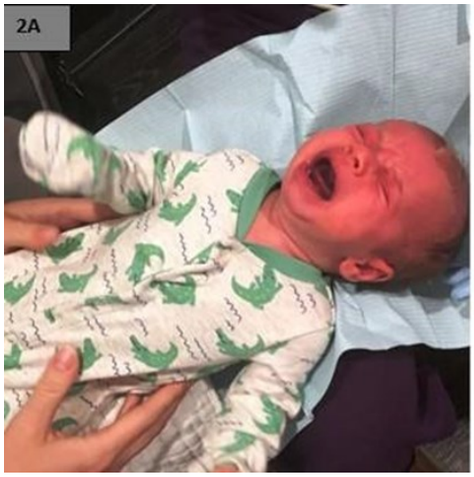

Figure 2: Gastro-intestinal pain from air ingestion coupled with hunger pains, both secondary to improper suck, make for a discontent baby as evidenced by dysregulated behavior: (2A) long cry sessions, (2B) constant moving.

gastric contents to reflux into the upper airway. This may be confused with other types of reflux disorders, leading to misdiagnosis and improper treatment.[47]

It is common for families experiencing breastfeeding difficulties to report this condition. Conversely, many find a reduction in colic symptoms by improving infant feeding through addressing their tethered oral tissues.[48]

Colic Issues Related to Lip Ties:

- **Bloating:** Due to excess air intake in the gastrointestinal system.
- **Bodily Tension:** Stiff limbs, clenched fists, arched back, tense abdomen.
- **Unhappy Baby:** Prolonged and intense crying without apparent reason.

3. Orthodontics

A lip tie significantly contributes to a gap between the front teeth, known as a diastema. It's important to note that dental spacing is a multifactorial phenomenon,[49,50] involving tooth size, jaw size, frenum location, size and tightness, the properties of lip and tongue muscles and nerves, as well as the individual's functional habits (Figure 3).

Multiple factors influence whether dental spacing will manifest. For example, a small jaw with large teeth may negate spacing, while a large tongue with weak lip muscles may increase the forces contributing to dental spacing. Ultimately, a lip tie may or may not succeed in creating a gap, depending on the sum of these forces. Nevertheless, lip ties do attempt to create a gap between the front teeth, and a lip tie release procedure can be a very effective treatment option as

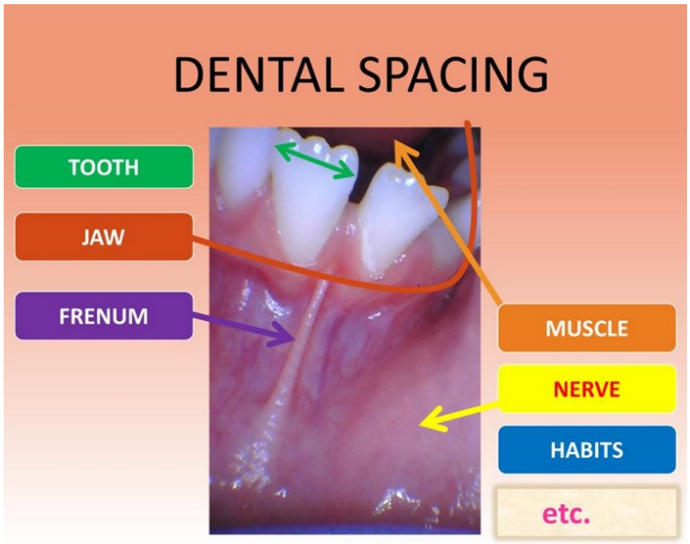

Figure 3: Multiple factors are at play creating a sum of forces that ultimately determine if the dental spacing may be expressed.

Figure 4: Infant with severe lip tie at pre-operative, 1 week post, and 6 months post frenectomy.

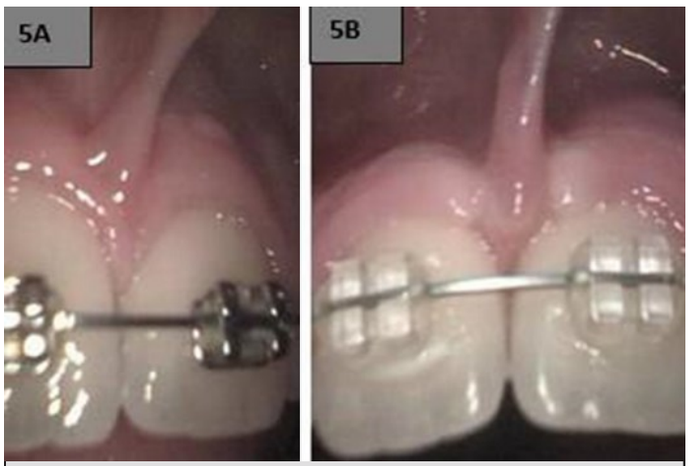

Figure 5A: Orthodontic space closure does not resolve a lip tie.
Figure 5B: Lip tie displaying blanching indicating pressure and pain.

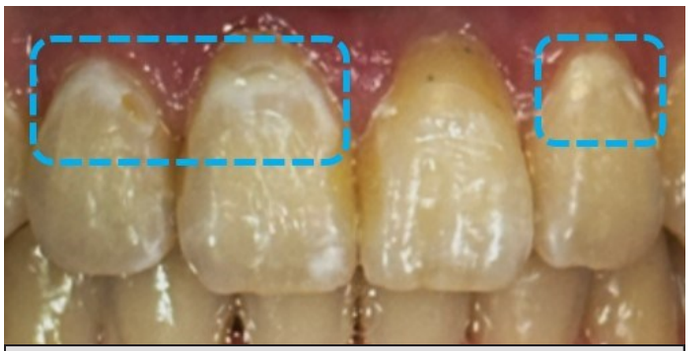

Figure 6: Moderate dental damage to the crowns of permanent teeth during orthodontic treatment.

shown in Figure 4.[51,52]

If there is a gap between the front teeth, the patient may be more inclined to invest time and resources into orthodontic

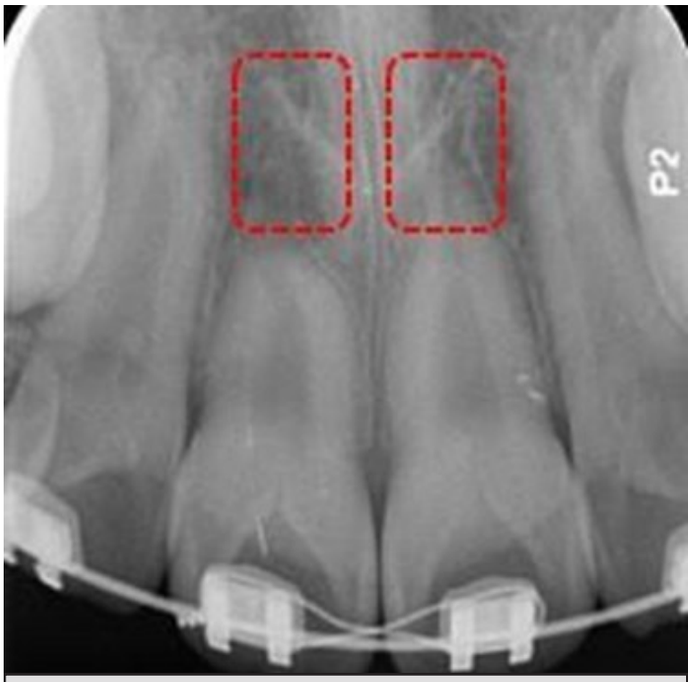

Figure 7: Radiograph illustrates severe root damage (root resorption) in the permanent dentition during orthodontic treatment.

treatment to correct the problem,[53] possibly still needing a frenectomy after braces[54,55] to minimize the high probability of the gap reopening[56] as shown in Figure 5.

Orthodontic treatment, whether with fixed metal braces or removable plastic trays (e.g., Invisalign), can cost a patient more than just time and money. Plaque is a major component of tooth decay, and all orthodontic appliances are potential plaque traps, increasing the risk of tooth decay during treatment as shown in Figure 6. Risk of root damage is also associated with orthodontic therapy (Figure 7).[57-62]

Orthodontic treatment has great potential for the growth and development of children; however, minimizing the need and duration of orthodontic treatment are worth considering.[57-62]

Issues Related to Orthodontic Treatment of Lip Ties:

- **Time Spent in Orthodontic Care:** To close the gap between teeth.
- **Financial Cost:** Associated with orthodontic treatment.
- **Damage to Permanent Teeth:** Possible during orthodontic procedures.
- **Gap Reopening:** May require frenectomy and additional orthodontics.

4. Speech

Dental spacing associated with lip ties can promote functional abnormalities, including deviations in speech.[63-65] The position of the anterior teeth significantly affects the articulation of sounds, with almost 90% of all consonants being formed in this region.[66] Spoken language development involves complex coordination of neural pathways controlling the tongue, palate, teeth, lips, alveolus, and other vocal organs.[67]

Some individuals may compensate for dental spacing without noticeable speech issues, while others may struggle, experiencing problems such as the ejection of saliva under the pressures of sound production. Food, liquids, and sound may escape through the gap during eating and talking as pressure builds in the oral cavity (Figure 8).

To prevent such potentially embarrassing events, some people habitually close their dental gap with their tongue and lips while speaking or eating. This consistent gap closure by the tongue may become a habitual pattern known as a "tongue thrust," which describes a swallowing pattern where an individual pushes the tongue against or between the teeth.[68] This habit may require functional therapy or appliance therapy to correct.

A sign of tongue thrust may be altered speech, where the tongue is postured differently as it compensates for the gap during speech. Malocclusions are highly prevalent in childhood and adolescence, being considered a public health problem worldwide, and are important predictors of tongue position and speech disorders.[69]

Speech Issues Related to Lip Ties:

- **Spitting While Talking:** Pressure ejects saliva.
- **Tongue Thrust:** Compensation alters tongue posture.
- **Altered Speech:** As the tongue manages saliva, sound, and gap.

Figure 8: Dental space negating proper speech and swallowing by relieving the necessary build-up of positive pressure required for proper sound production and deglutition (swallowing).

5. Eating Solids

While the tongue plays a major role in proper swallowing mechanisms—making tongue ties an evident contributor to feeding problems—lip ties can also influence the eating of solids. Adjacent to the teeth is a band of tissue called the keratinized layer or attached gingiva, commonly referred to as the "gums." This stronger, "firm and resilient" layer[70] is much tougher than the oral mucosa and is intended to withstand the forces of mastication and various food textures.

Although research in this area is limited, observations suggest that restricted lips are associated with altered feeding behaviors, such as delayed transition to solid foods, preference for soft and pureed foods, and avoidance of certain foods. These associations need further study, but they have merit based on my observations in pediatric practice, where there is a higher incidence of lip ties. The following is my attempt to offer a rational explanation for these behaviors.

Lip ties, as well as non-restrictive lip frenums, are covered by a layer of non-armored tissue that may lie close to the teeth (gumline). If this weaker tissue is close to the gumline, it can pose a problem when biting into food (Figure 9). During mastication, solids rub against the lip tie and may cause discomfort, altering feeding behavior and prompting statements like "I like apples; I just don't like to bite into them."

In toddlers, this may manifest as shying away from solids and being labeled as picky eaters, preferring softer foods—which can translate into poor nutrition (Figure 10).

Eating Issues Related to Lip Ties:

- **Pain When Biting into Solids**
- **Poor Nutrition:** Preference for softer foods, leading to picky eating.
- **Altered Eating Habits:** Restricted lip and dental spacing may create compensating tongue and jaw movements.

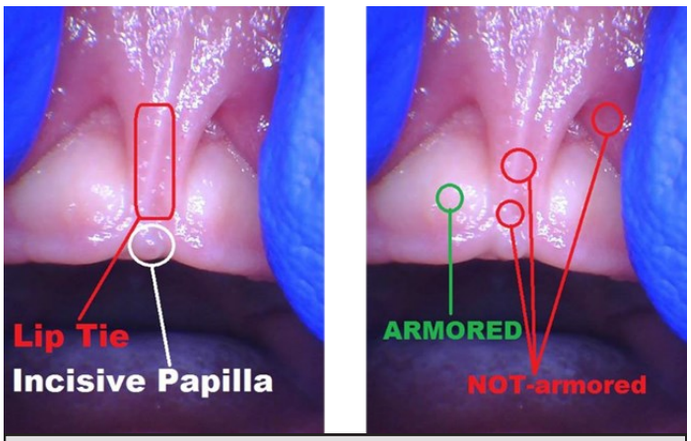

Figure 9A: Differentiating the anatomy of upper lip tie vs. the incisive papilla.
Figure 9B: Differentiating keratinized armored gingiva vs. weaker NOT-armored "Tie" tissue.

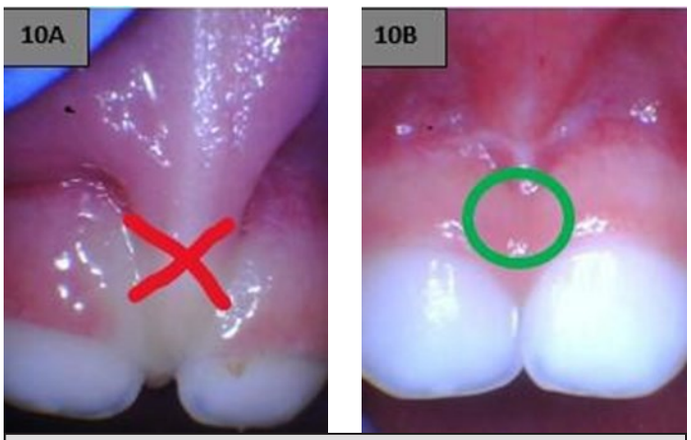

Figure 10A: Pre-surgery the weaker mucosal tissue of the lip tie is shown as a red "X".
Figure 10B: Post-surgery the naturally keratinized stronger "armored" tissue shown as the green "O" is capable of withstanding the rigors of mastication.

6. Oral Hygiene

Lip ties can pose significant challenges to proper tooth brushing.[71] The keratinized—attached—gingiva can easily tolerate the bristles of a soft toothbrush. However, the non-armored oral mucosa covering lip frenums may become a source of discomfort when brushed.

Oral hygiene is crucial for the health and wellbeing of an individual. Despite preparation, a parent's efforts to establish good oral hygiene may be thwarted when their toddler consistently turns away to avoid contact with toothbrush bristles. Both frustrated parents and experienced dental professionals may be puzzled when a cooperative child has significant plaque buildup only on the upper front teeth—a relatively accessible area (Figure 11).

Plaque buildup promotes gingivitis; in some individuals, unattended dental plaque wears down tooth enamel and is associated with dental caries, leading to restorative dentistry that requires time, money, and may cause discomfort. The American Academy of

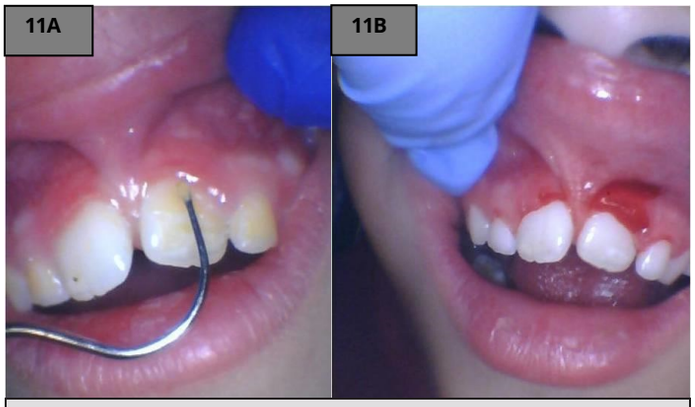

Figure 11A: Adolescent patient with chronic plaque buildup adjacent to lip tie.
Figure 11B: Same patient with severe localized gingivitis adjacent to lip tie.

Pediatric Dentistry states that movements of the lip can cause the frenum to pull on the fibers inserted into the free marginal tissue, creating pocket formation that leads to food and plaque accumulation.[72] Surgical intervention can prevent subsequent inflammation, recession, pocket formation, and possible loss of alveolar bone and/or teeth.[73]

While proper brushing is imperative for maintaining oral health, the role of carbohydrates in fueling caries should not be ignored. Food clearing, especially in patients with the highest frequency of feedings (e.g.,

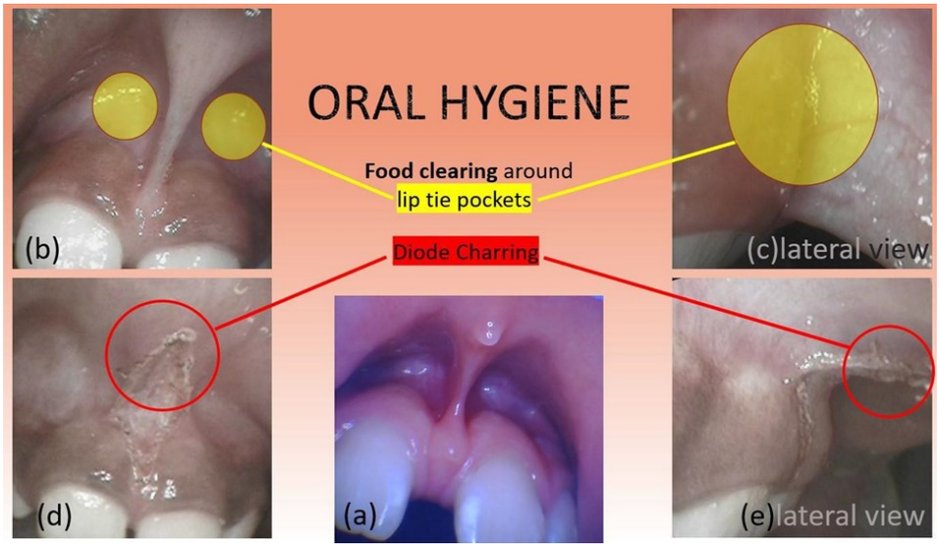

Figure 12:
(a) Adolescent patient with lip tie pockets
(b, c) Infant lip tie pockets pre-surgery, front and side views respectively
(d, e) Infant lip tie post-surgery, front and side views showing resolution of pockets and diode charring potentially trading bloodless field with greater discomfort.

infants), may be impaired by lip tie pockets (Figure 12). The pooling of milk in lip-tie pockets contributes to early childhood decay.[74] Resolution of lip ties may be swift, almost bloodless, and comfortable especially if capable quality instruments are utilized.[75-77]

Oral Hygiene Issues Related to Lip Ties:

- **Pain During Tooth Brushing**
- **Plaque Accumulation**
- **Bad Breath:** Due to dental plaque.
- **Gingivitis:** Due to dental plaque.
- **Cavities:** Due to dental plaque.
- **Time Lost to Restorative Dentistry**
- **Financial Cost of Restorative Dentistry**
- **Pain Associated with Restorative Dentistry**
- **Food Trapped in Lip Tie Pockets:** May lead to tooth decay.

7. Growth and Development

Lip restrictions can affect the gums, the bone beneath the gums, or even segments of the face.[78] The upper jaw, known as the maxilla, has an anterior portion called the "pre-maxilla," which contains the upper front teeth.[79] A tethered upper lip can exert a "harness" effect on this palatal region/upper jaw/pre-maxilla.

The effect on palatal formation and other cranial bones via improper infant suckling and tongue position has been established and discussed in several professional papers.[80-82] Fortunately, the pre-maxillary sutures remain open until about 12 years of age, allowing for orthodontic and orthopedic treatment to remedy the situation. Early intervention, around 8 years of age, using interceptive orthodontics (e.g., palatal expanders, headgear) can be as effective.[83]

A tethered lip pulling on the gumline may cause periodontal destruction.[84,85] Gingival recession can be apparent at birth or may take decades to manifest. In infants without dentition, it is commonly referred to as "notching" of the gumline, located next to the attachment point of the upper lip tie (Figure 13).

This bone loss, known as "notching" or alveolar hypoplasia,[86] occurs because a restricted lip places compression forces on the alveolar bone, increasing osteoclastic activity and inflammation, leading to resorption of the underlying bone. Following the reduction of local alveolar bone mass is the recession of the gingiva covering the bone[87] as shown in Figure 13B.

In the infant, depending on the extent of the damage, reversal of bone loss may be seen within weeks or months after a frenectomy. Post lip tie revision, with the cessation of tension-induced inflammatory processes, osteoblasts may repair the

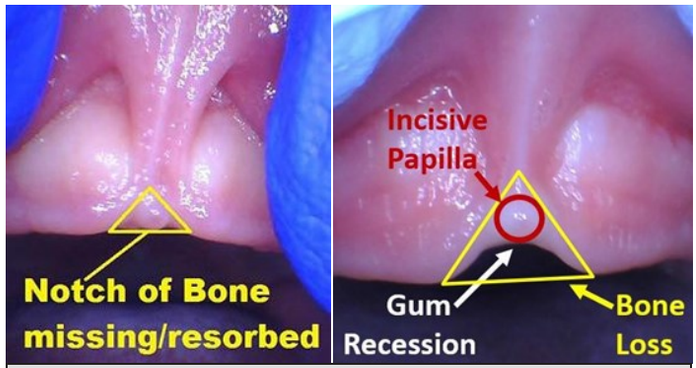

Figure 13A: The tension forces of lip tie often dissolve bone into a "notching" of bone.
Figure 13B: Continued bone resorption may become gross periodontal pathology.

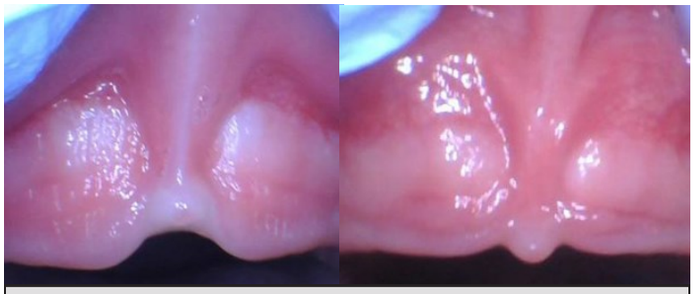

Figure 14A: Infant with upper lip tie and severe bone loss at the gumline.
Figure 14B: Same patient six months post-revision with normal gumline.

alveolar defect, and the patient's phenotype may normalize (Figure 14).

An alternative treatment for lip tie-related periodontal damage may be a gum graft, a common periodontal surgical procedure performed in the U.S.,[88] which can be unsightly, painful, and sometimes unpredictable.

Growth and Development Issues Related to Lip Ties:

- **Palate Deformation:** Inadequate widening due to improper latch/feeding mechanics.
- **Orthopedic Treatment:** Interceptive/ Phase 1 orthopedic jaw correction.
- **Bone Loss:** Following tension forces.
- **Gum Recession:** Following bony changes.
- **Financial Cost for Corrective Periodontal Surgery**
- **Extreme Pain from Gum Graft Harvest Site**

8. Esthetics

The spacing of the upper front teeth (diastema) is associated with negative impacts on self-image, leading to behaviors like smiling less, covering the mouth when laughing, and a general perception of reduced beauty.[89-91] While these connotations are prevalent, they are subjective. There are many examples of people in the entertainment industry, where beauty matters most, who have been successful with their dental spacing (Figure 15).

Despite not being a barrier to success, upper lip tie spacing is a delicate matter that can greatly impact one's emotional well-being.[92-94] Many people choose to “repair” what they perceive as a problem. Dental professionals are taught that a diastema is not a problem unless it is a problem for the patient. Nevertheless, anterior spacing is among the most frequent reasons why patients seek orthodontic treatment.[95]

It's important to distinguish between different etiologies of anterior dental spacing such as: spacing between teeth that are not touching, an esthetic concern due to orthodontic spacing, versus spacing between teeth that are touching, an esthetic concern with underlying pathology due to periodontal bone loss (Figure 16).

Lip ties may also restrict the smile. Since

Figure 15: Many highly successful entertainers achieved their success with their dental spacing.

Figure 16A: Esthetic of midline diastema orthodontic spacing in teeth not touching.
Figure 16B: Esthetic and pathology of periodontal bone loss spacing of touching teeth. *Source: Ballini A, Scattarella A, Crincoli V, et al. (2010). Head & Face Medicine. Licensed under CC BY 2.0.*

lip ties tether the lips to the gums, they can mechanically restrict lip movement during smiling, clearing food, or kissing, leading to functional disadvantages and potential esthetic concerns.[98] The need for treatment is often attributed to esthetic and psychological reasons rather than functional ones.[99] The American Academy of Pediatric Dentistry confirms that lip ties can be related to esthetics and psychological considerations.[100]

Esthetic Issues Related to Lip Ties:

- **Malocclusion:** Preference for straight teeth.
- **Dark Space Between Front Teeth**
- **Unnatural Lip Movement During Smile**
- **Psychological Considerations:** Impact on self-image.

9. Social

While tongue ties often receive attention for their potential impact on social lives, lip ties are equally important, even disregarding the aesthetic concerns already discussed. Infants struggling with restricted lips affecting their feeding may, in turn, reduce their parents' sleep. Growing literature identifies mechanisms linking sleep to long-term health risks.[101] Short sleep is implicated in premature mortality as well as cardiovascular disease, cancer, obesity, and diabetes.[102,103]

Reduction in sleep duration may independently exacerbate inflammatory responses to stressors. Experimentally, sleep-deprived people mount exaggerated sympathetic responses to stressful tasks compared to well-rested people.[104,105] Consequently, sleep problems may provoke hostility in couples.[106,107] Reduced parental sleep has also been linked to reduced parental quality .[108]

Beyond serious health risks, our society values recreational activities. Recently, a healthcare provider reported discomfort from her child's snorkeling mouthpiece rubbing against the upper lip tie, which was resolved with a frenectomy.[109]

Social Concerns Related to Lip Ties:

- **Kissing:** Restricted lip movement.
- **Recreation:** Issues with swimming gear mouthpiece fit.
- **Parental Quality:** Decreased with lack of sleep.
- **Marital Strife:** Parents sleep less as infants sleep less.

10. Trauma

Physical damage to lip ties is common after traumatic blows to the face and lips.[110,111] Such tears may result in bleeding episodes, excess flaps of tissue, and possibly

infection. Fortunately, bleeding episodes are generally minimal or can be controlled with pressure hemostasis, and healing often results in acceptable esthetics without infection.

However, some healthcare professionals suggest letting an accident "fix" the lip tie. It is unacceptable to include trauma as a valid treatment option for revising lip ties. Inviting an accident as a proposed treatment constitutes poor medical advice. As the notable pioneer in the field of infant laser frenectomy Dr. Lawrence A. Kotlow aptly states, such advice amounts to "supervised negligence."[112]

While lip tie trauma is often considered a trivial intra-oral injury,[113] bleeding can be significant depending on the accident and the responsiveness of those nearby. Infections, although rare, do occur and can be serious. For example, a 9-month-old infant was referred for multiple tooth extractions due to "dental infections." Clinical and radiographic examinations revealed no dental infection but a massive soft and hard tissue infection resulting from an accidental lip tie trauma. The infection had spread beyond the alveolus into the maxillary bones, accompanied by soft tissue cellulitis extending in several directions (Figure 17).

Lip tie trauma often leaves behind excess mucosal tissue in random configurations (Figure 18). These new, possibly unwelcome, lip tie deformations can make corrective surgery more complex and unpleasant for patients (Figure 19). It's important to note that healthcare providers must be vigilant in explaining any torn labial frenum in an infant or toddler's mouth to rule out abuse.[114]

Issues Related to Lip Tie Trauma:

- **Incidence:** Lip tie accidents are common.
- **Bleeding Episodes:** May vary in severity.
- **Infections:** Rare but serious ones occur.
- **Esthetics:** Trauma may leave behind less-than-ideal anatomy.
- **More Complex Corrective Surgery:** Trauma can make surgery more difficult.

11. Ease of Care

Infant lip tie revisions can be convenient and relatively comfortable with proper case selection, optimal equipment, technique, pain relief, and aftercare. There is procedural discomfort for about 10 seconds, parent-child separation distress of about 2-5 minutes, as well as post-procedure discomfort.

Figure 17A: Baby with severe infection post trauma of upper lip tie.
Figure 17B: Close up showing the palatal spread of infection.
Figure 17C: Close up of the facial spread of infection.

Figure 18A: Frequently trauma creates a mild non-event and a small size remanent parting favor.
Figure 18B: At times a more moderate event is experienced perhaps leaving behind a larger remanent.
Figure 18C: Very displeasing events do occur at times posting a fibrous daily aggravation of an artifact.

Figure 19: This post-traumatic lip tie correction was more arduous for the infant patient due to the large fibrous tissue excision compared to a typical release revision.

Post-procedure discomfort is due to the body's inflammatory repair response and any active wound care that may be recommended. Within the first 24 postoperative hours, newborns may experience moderate pain that can be managed with analgesics such as ibuprofen or acetaminophen.[115-118]

Parents and providers may justify the uncomfortable aspects of this procedure by pointing out the potentially high benefit-to-cost ratio for the affected family. The procedure's discomforts may be a small fraction of the overall discomfort the breastfeeding dyad is already experiencing without it (e.g., reflux, colic, hunger, nipple pain, lack of sleep).

An important motivation for parents not to wait to revise their infant's tethered lip may be to minimize the recollection of the surgical experience due to the patient's extreme youth. The sooner this procedure is performed during infancy, the fewer mid-procedure complications seem to occur, as a less muscular, less combative, edental baby offers less physical opposition, allowing for safer surgery. So safe, in fact, that sedation is not necessary.

Recognizing that this procedure is performed on vulnerable populations (postpartum parents and infants), special sensitivity is vital to ensure informed decisions are made. Along with a frenectomy procedure's potential benefits, informed decisions must include a comfortable environment and full disclosure of risks, options, timing, appropriate sequencing of a team approach, and the option of no treatment and its risks—not just a discussion of possible benefits.

Treatment Considerations Related to Lip Ties:

- **Minimal Memory:** Recollection is minimized with early infancy.
- **Minimal Discomfort:** Numbing and pain

medication can be provided.

- **Minimal Risk:** Infants pose fewer physical challenges than young children.
- **No Sedation Needed:** Infants are easier to manage than teethed toddlers.
- **No Sutures:** Wound healing is by secondary intention and may need managing.
- **Exceptional Safety:** Surgical complications are possible but occur with a very low probability.
- **Exceptional Satisfaction:** Outstanding long-term patient satisfaction noted.

12. Access to Care

The developing child often lacks the coping skills necessary to navigate surgery, making the provision of dental care challenging.[119] Due to the behavioral challenges of many one- to five-year-olds, clinicians who agree to treat this age group without general anesthesia are few. Therefore, access to competent, quality care beyond infancy—particularly for toddlers—is limited at this time.

Many functional issues associated with lip ties may never manifest; however, problems that develop over time may be harder to treat in childhood, distressing for teenagers, and rare during the college years when time and finances may be limited. The majority of people preferring a lip tie revision for their infants find the service available and affordable or perhaps covered by insurance. These current realities should be considered as parents contemplate treating their baby sooner rather than later.

Access to Lip Tie Treatment Considerations:

- **Prevalence of Care:** Higher for infants than toddlers.
- **Financial Cost:** Many find the fees affordable or covered by insurance.

Conclusion

These findings implicate ankylolabia (lip ties) as an under-recognized cause of breastfeeding difficulty and suggest that labial frenectomy is an effective treatment in these patients.[120] During their child's infancy, parents have the opportunity to treat the functional issues arising from tethered oral tissues and exercise their parental right to help prevent other issues that may emerge.

As healthcare providers, we are active partners in the parents' informed decision-making process, but ultimately, the choice is theirs to make. We can support people's right to treat current problems, prevent future problems, wait and observe, or continue learning to amass the knowledge needed to feel at ease.

Although quantitative studies are lacking, qualitative research has shown that lip tie alone can contribute to breastfeeding difficulty. The profession of dentistry has long accepted lip ties as contributors to pathology.[121] Furthermore, it is reasonable to support additional research on the causative association between a hyperplastic labial frenum and increased risk of caries or periodontal disease, upper lip restriction, and difficulties with breastfeeding.[121]

There are many possible causes of breastfeeding problems; therefore, it is imperative that infant patients be screened by International Board Certified Lactation Consultants (IBCLCs) for issues other than tethered oral tissues. A team-based approach is best to help with treatment planning.

In striving to master the technical aspects of the procedure itself, each surgeon must practice awareness of contraindications as well as indications for a frenectomy, so that this centuries-old, effective, and safe procedure may continue to honor each patient within appropriate boundaries.

About the Author

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Dr. Shervin Yazdi was born in Manhattan, New York, and raised in the San Francisco Bay Area, California. He completed his undergraduate study of biology at Sonoma State University in 1990, his Doctor of Dental Surgery at UCLA in 1994, and his Pediatric Dentistry residency at UCLA in 1996. He has been practicing pediatric dentistry in Northern California for the past 28 years.

Dr. Yazdi has kept his passion for soft tissue surgery alive due to the clear functional benefits it provides his patients. He routinely attends national and international conferences, learning from other providers what is essential to bring you the functional effectiveness and safety families deserve. He was certified by the Academy of Laser Dentistry in 2002, Laser Soft Tissue re-certified in 2013, a Fellow of the World Clinical Laser & Imaging Institute in 2014, and a Diplomate of the American Board of Laser Surgery in 2018.

Dr. Yazdi has performed over 10,000 frenectomies in the past 25 years using a variety of lasers and laser wavelengths. With decades of unwavering passion for relieving oral restrictions, Dr. Yazdi has limited his thriving practice to the sub-specialty of infant frenectomy; he practices out of the Infant Frenectomy Center he has scratch built in 2016; he finds no greater joy than to relieve the many ailments afflicting a baby.

Dr. Yazdi sincerely believes “success” depends on a community of open-minded healthcare professionals who are humble with their talent but generous with their knowledge.

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