

# The lingual frenulum and its relation with breastfeeding: understanding of a health team

## Frênulo lingual e sua relação com aleitamento materno: compreensão de uma equipe de saúde

## Frenulo lingual y su relación con la lactancia materna: comprensión de un equipo de salud

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### **Abstract**

**Introduction:** Breastfeeding is the best way to feed a baby and should be performed exclusively, in the first 6 months of life. The tongue plays an important role in the suction movement. The tongue has on its underside a membrane that connects it to the floor of the mouth, called the lingual frenulum, which can be considered normal or altered. **Objective:** To verify the understanding of health professionals regarding the relation between the lingual frenulum and breastfeeding. **Method:** This is a descriptive, qualitative study. Data collection was performed in a Hospital and two Child Care Services. A semi-open interview was conducted with seventeen health professionals from these services. Subsequently, the interviews were analyzed using content analysis, thematic modality. **Results:** From the speeches, two thematic nuclei revealed: Considerations on the lingual frenulum, breastfeeding and speech; Criteria for indication by professionals for the frenotomy procedure. **Conclusion:** In view of the speeches of the participating professionals, it was verified that there is no consensus about the relationship between breastfeeding and the lingual frenulum.

**Keywords:** Breast feeding; Lingual frenum; Health personnel.

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### **Authors' contributions:**

IKK: study design, data collection and analysis, article writing; PMP, VCG and CCC: data analysis, article writing; CIF: study design guidance, data collection and analysis, article writing.

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## Resumo

**Introdução:** A amamentação é a melhor forma de alimentar um bebê e deve ser realizada exclusivamente, nos primeiros 6 meses de vida. A língua exerce papel importante para o movimento de sucção. A língua possui em sua face inferior uma membrana que a conecta ao assoalho da boca, denominada frênulo lingual, o qual pode ser considerado normal ou alterado. **Objetivo:** Verificar a compreensão dos profissionais de saúde no que diz respeito à relação entre o frênulo lingual e o aleitamento materno. **Método:** Trata-se de um estudo descritivo, de caráter qualitativo. A coleta de dados foi realizada em um Hospital e dois Serviços de Puericultura. Realizou-se entrevista semiaberta com dezessete profissionais da saúde desses serviços. Posteriormente, as entrevistas foram analisadas utilizando análise de conteúdo, modalidade temática. **Resultados:** A partir das falas, revelaram-se dois núcleos temáticos: Considerações sobre o frênulo lingual, aleitamento materno e a fala; Critérios de indicação pelos profissionais para o procedimento de frenotomia. **Conclusão:** Diante das falas dos profissionais participantes, verificou-se que não há consenso da compreensão sobre a relação entre o aleitamento materno e o frênulo lingual.

**Palavras-chave:** Aleitamento materno; Freio lingual; Profissional da saúde.

## Resumen

**Introducción:** La lactancia materna es la mejor forma de alimentar a un bebé y debe realizarse exclusivamente en los primeros 6 meses de vida. La lengua desempeña un papel importante para el movimiento de succión. La lengua posee en su cara inferior una membrana que la conecta al piso de la boca, denominada frénulo lingual, el cual puede ser considerado normal o alterado. **Objetivo:** Verificar la comprensión de los profesionales de salud en lo que se refiere a la relación entre el frénulo lingual y la lactancia materna. **Método:** Se trata de un estudio descriptivo, de carácter cualitativo. La recolección de datos fue realizada en un Hospital y dos Servicios de Puericultura. Se realizó una entrevista semiabierta con diecisiete profesionales de la salud de estos servicios. Posteriormente, las entrevistas fueron analizadas utilizando análisis de contenido, modalidad temática. **Resultados:** A partir de las palabras, se revelaron dos núcleos temáticos: Consideraciones sobre el frénulo lingual, lactancia materna y el habla; Criterios de indicación por los profesionales para el procedimiento de frenotomía. **Conclusión:** Ante las palabras de los profesionales participantes, se verificó que no hay consenso de la comprensión sobre la relación entre la lactancia materna y el frénulo lingual.

**Palabras claves:** Lactancia materna; Freno lingual; Profesional de la salud.

## Introduction

Breast milk is the most suitable food for any newborn, being extremely important for the health of the baby. The World Health Organization (WHO) recommends exclusive breastfeeding up to 6 months of age and maintenance until the age of two years or more. Theoretically, every newborn that does not have an organic impairment has the necessary conditions for breastfeeding.<sup>1</sup>

Breastfeeding is determinant for facial growth, as this growth depends directly on the movement of the perioral and chewing muscles, teeth, tongue and swallowing. Therefore, breastfeeding is important for the development of the musculature during breast milking, as well as for the neural develop-

ment of the newborn and for the adequacy of the oral functions.<sup>2</sup>

The tongue is located in the oral cavity and is important in sucking, swallowing, chewing and speaking. It has, on its lower face, a small fold of mucous membrane that connects to the floor of the mouth, being dominated the lingual frenulum.<sup>3</sup> When this fold does not undergo complete apoptosis in the intrauterine period, ankyloglossia occurs, since the residual tissue that remains may limit the movements of the tongue.<sup>4</sup> This congenital anomaly may occur in whole or in part and may interfere with the oral functions, including suction due to a limitation in the free movement of the tongue.<sup>5</sup>

In the evaluation, the frenulum may be normal or altered, and this evaluation is performed visually

by health professionals, observing the aspect of the frenulum and the mobility of the tongue.<sup>6</sup>

Martinelli and his collaborators elaborated a protocol for the anatomofunctional evaluation of the lips, tongue, lingual frenulum and orofacial functions of infants. This instrument aimed to collect data on normality and alterations of functions, making a correlation with the frenulum, for possible early interventions, in order to decrease or extinguish alterations that may occur in sucking and swallowing functions during breastfeeding, chewing and speaking.<sup>3</sup>

The protocol underwent some alterations in order to increase the accuracy of the tool in the identification of changes in the frenulum and its possible interferences in breastfeeding.<sup>5</sup> The “Protocol for evaluating the lingual frenulum with scores for infants” is now compulsory in maternity hospitals, being known as “tongue test”. Law No. 13.002/14 makes it mandatory to apply the aforementioned protocol in newborns in hospitals and maternity hospitals in Brazil.<sup>5,7,8</sup>

The prevalence of ankyloglossia is very variable. In a study conducted in the city of Irati-PR, it was 0.8%; in contrast, another study presented a prevalence of 22.54%. In another study, a prevalence of 4.2% was observed.<sup>9,10,11</sup>

A recent study showed that, despite the strong correlation between lingual frenulum changes and altered suction function, there are cases in which this correlation is not observed.<sup>12</sup>

Alterations in the lingual frenulum are commonly related to several alterations and difficulties that may occur in breastfeeding, and these are often causes of early weaning. Early weaning is still a reality in Brazil, occurring even with mothers who undergo professional support.<sup>13,14,15</sup>

In the last decades, the attitudes of health professionals towards breastfeeding have been discussed; in a generalized way, the results are unanimous in pointing out the advice of the health professional as a basic element for successful breastfeeding. The World Health Organization (1989) issued a joint statement with UNICEF which includes the “Ten Steps to Successful Breastfeed-

ing”. The health professional enters with great responsibility in the support and counseling of the nursing mothers since it is already proven that the performance of the professional who will be following the breastfeeding process is of fundamental importance in the maintenance of breastfeeding.<sup>15,16</sup>

In view of the above, it is possible to observe the importance of the conduct of health professionals, since such conduct will influence the practice of breastfeeding. Thus, the objective of the present study was to verify the understanding of health professionals regarding the relationship between the lingual frenulum and breastfeeding.

## Method

This is a descriptive study, with a qualitative design. The collection was performed in a hospital and two other health service sites in a municipality in the interior of the state of Paraná.

Respecting the CNS Resolution - 466/2012 the present study was approved by the Ethics Committee under letter # 358,809.

Seventeen health professionals participated in the semi-structured interview, two social workers, five nurses, one physiotherapist, two speech therapists, two pediatricians, two nutritionists, one psychologist, and two nursing technicians. All participants were female. For the present study, it was decided to invite all the professionals involved in the assistance to breastfeeding, since it is considered that all of them can, directly or indirectly, influence the initial process of breastfeeding. In addition, all professionals should have knowledge about the relationship between breastfeeding and the lingual frenulum.

The criterion of inclusion was professionals who worked with breastfeeding and in the care of newborns. The exclusion criterion was professionals who worked with the care of infants older than 28 days. The characterization of the professionals who participated in the research is shown in the table below. These were characterized by acronyms (P1, P2,..., P17) in order to keep their identity confidential.

**Table 1.** Characterization of the professionals participating in the semi-structured interview.

Identification	Degree	Age y/o	Practice Time
P1	Social Worker	42	8 years
P2	Social Worker	27	3 years
P3	Nursing	35	12 years
P4	Nursing	27	2 years
P5	Nursing	40	18 years
P6	Nursing	25	3 years
P7	Nursing	40	3 years
P8	Physiotherapy	37	12 years
P9	Speech Therapy	24	3 years
P10	Speech Therapy	24	1 year 6 months
P11	Medicine	54	30 years
P12	Medicine	48	20 years
P13	Nutrition	26	6 months
P14	Nutrition	26	5 years
P15	Psychology	29	5 years
P16	Nursing Technician	39	1 year
P17	Nursing Technician	54	19 years

The methodology used was that of a semi-open or semi-structured interview, which is focused on a subject on which a script with key questions is elaborated and can be supplemented with questions that arise at the time of the interview.<sup>17</sup>

The participants reported data about their professional performance and responded to the interview script composed of the following guiding questions:

- *Have you ever heard of lingual frenulum?*
- *For you, what is the relationship between the frenulum and breastfeeding?*

The interview was closed when the answers were saturated, and this was recorded and subsequently transcribed. The data obtained through the interview were analyzed using content analysis, thematic modality.<sup>18</sup>

The content analysis is a concept modeled historically in search of theoretical-methodological responses, and this technique allows making inferences about the data in a given context using specialized and scientific processes. The material to be analyzed will be organized into units of a registry, i.e. thematic nuclei.<sup>18</sup>

In the presentation of the statements of the participants were used some specific signs/punctuation, they are:

[...] - Part of the participant's statement that was omitted in the transcribed passage.

... - Hesitations of the participant.

## Results

The results were listed in two thematic groups, being: considerations on the lingual frenulum, breastfeeding, and the speech; criteria for indication by professionals for the frenotomy procedure.

## Discussion

### *Considerations for lingual frenulum, breastfeeding, and speech*

Lingual frenulum alterations are most commonly associated with breastfeeding difficulties and subsequently, in speech.<sup>19</sup> With regard to breastfeeding, we can observe three variations in the professionals' discourse. Firstly, there are those who believe in a direct interference of the altered frenulum in breastfeeding:

"Well, it is, in the difficulty of breastfeeding we know that it is directly connected with this, right? Even the mother exposes this difficulty to us [...] So, we do postpartum consultations until the tenth day, right after delivery, and it's the days she has difficulty putting, positioning the baby and the babies that have this difficulty we notice in their report."

P3

"I believe so, because how can I express myself to you... you just hold your tongue and try to suck something, I think to them, newborn, that no longer has that experience of movement in their mouth, ri-

ght? It's... still with a little difficulty, with the tongue there, tied, I think it makes it more difficult to them to suck." [Talking about breastfeeding difficulty]

P7

"[...] usually with the short frenulum the child will have difficulty of, in the breastfeeding itself, right, difficulty of the correct handle, and everything else, right, of the matter of the mother's breast milk withdrawal, so it is the main question of the short frenulum when the baby is newborn, right?"

P9

"[...] for what we see of the children here is only on the part of breastfeeding, right? [...] the doctor has already ordered you to compare the child that has and the one that does not have (short frenulum). The one that has cannot even hold the mother's breast, there, the nipple, because the moment she begins to suck, it escapes. [...] the only thing that we see of difference is this, that at the time of the child suck that she does not have that strength so.... ends up escaping from her little mouth.

P16

The professionals P3, P9, and P16 bring in their statement the difficulty of taking the breast as the main alteration observed in babies with a shortened frenulum. The professional P7 reports that the difficulty occurs due to the minimization of the movement of the tongue.

Several factors besides the altered lingual frenulum and organic factors can influence the maintenance of breastfeeding, among them we can highlight: skin color, maternal schooling, companion support, having had previous experiences in breastfeeding and having had discharge from the hospital exclusively breastfeeding. Breastfeeding is not a purely physiological and innate act, because it depends on factors other than just the organic of the nursing mother and the baby, therefore, the appearance of difficulties at the beginning of breastfeeding is very common, being early weaning a major public health problem.<sup>20,21</sup>

The statement of the participant P12 brings the improvement in the milking as a consequence of the release of the frenulum. A case study attests to the improvement in milk withdrawal shortly after the frenotomy. Babies with altered lingual frenulum may present fatigue during breastfeeding, a decreased time between breastfeeding and difficulty in sucking.<sup>22,3</sup>

"I think it disturbs breastfeeding, there are cases of children like that, who comes from the hospital... now there is the tongue test, right, so the children come from the hospital and we sometimes do the operation here and it makes a difference, I have seen, here, that the child is able to push the tongue more, with the tongue the mother's breast, to make a better milking."

P12

Professionals P1, P10, P11, P17 present a divergent view of what we have seen above since they believe that the shortened frenulum will not cause difficulties in breastfeeding. The statement of P10 is particularly interesting, as his workplace is the one hospital that meets all the requirements of the Child-Friendly Hospital Initiative.<sup>23</sup>

"Breastfeed normal. So no... it does not influence, I do not know if it has any, right? But specifically speaking some [...] symptom something like that, but as far as I know, in breastfeeding it does not influence."

P1

"So here in practice I've seen several frenula and with various insertions so, it is, in relation to breastfeeding this has not influenced much, right? It is, with adequate jaw movement, anteroposterior, the baby has successfully managed to breastfeed. For the most part, everyone here from inside the hospital, they are discharged from the hospital by suckling well the mother's breast, right?"

P10

"I find it ridiculous, [...] I do not see any sense. I have 30 years of profession, 30 years of working with children, I have never seen a lingual frenulum disrupt anything, neither speech nor breastfeeding."

P11

"[...] I know this from what we hear, but I do not know "daughter" if there is anything to do, I particularly do not think so. Because the children of my time who speak everything with their tongue-tie, I think they were all breastfed, and not, in my time, there was no surgery, I was really, I do not know, but probably they were all breastfed."

P17

In this hospital, the puerperal women stay in joint lodging with their newborn and exclusive breastfeeding is practiced, and the vast majority should be discharged from the hospital to achieve satisfactory breastfeeding. Therefore, the alteration should be diagnosed already within the hospital,

since hypothetically this newborn would present difficulties to perform breastfeeding, but this is not observed in practice. What occurs in practice, according to the statement of participant P9 is:

“... but usually here, as I said, the babies are arriving later so we talk to their mother, if we see that there is something that justifies a physical evaluation I do, but, it’s... they’re really few cases, right? Like I said, sometimes it could have that mother who had difficulty in the beginning and when she gets here to me has already dried the milk because it is already in the bottle, already passed then would not have because I do this, the question of the handle, thereof the thing, it has passed, so it would not justify doing the physical examination, right?”

P9

There are still those professionals who report an adaptation of the mother/baby dyad in the face of adversity that the altered frenulum can cause:

“I believe that it will have difficulty, however, I believe that it is going to have an adaptation, and treatment, resources search, resources to improve, right?”

P15

“I think the baby is going to have a bit of trouble, but that does not stop it from breastfeeding, for what I have a little knowledge right? We see a lot, if it is going to be difficult, we are there helping the baby and teaching the mother to take it, even more, if not, if it has an inverted nipple. But it will not stop him from nursing.”

P4

“I don’t think so, because it is necessary to stimulate, encourage and stimulate it to develop.” [talking about difficulties in breastfeeding babies with altered lingual frenulum].

P5

“But so, sometimes the frenulum is a bit short, you may consider it short, only that the baby is nursing well, he is able to compensate in some way, [...] I think it also depends on this compensation of the baby, if he can compensate, has the frenulum so, not too short, [...] it may be that the doctor, someone says that it is short, but the baby is suckling well, I do not see why to do any intervention.”

P9

In a case study, the baby presented an altered frenulum and despite compressing the nipple, its nursing mother did not present any symptoms such as pain or decrease in milk production. In addition,

it was observed that the amount of milk ejected and the extent of tongue restriction are factors that can contribute to effective breastfeeding. Thus, it is possible that an adaptation of the dyad occurs in the face of the organic limitation of the baby.<sup>24</sup>

It is a factor of great importance to consider the individuality of each woman as well as that of her baby. Specific characteristics, as mentioned above, may contribute to the success of breastfeeding, in addition to all the professional and family support that the infant needs at this stage. We can verify this concern in the statement of P3 when the participant talks about her conduct facing a case of shortened frenulum without difficulties in breastfeeding:

“It depends a lot on the size of the nipple, the size of the areola, the size of the baby, the size of the little mouth, a smaller baby, bigger, okay? It’s... there are mothers, there are women, not mothers, but women who have thicker, more protruding nipples, maybe it also makes more difficult to the baby, which is born smaller with 2,600 (kg) so, each case is a case. Oh, it’s the individuality of each one, you know? You do not just evaluate the baby and if you only have one alteration or not, you have to evaluate everything, the context.”

P3

The care as a humanized care in health services depends directly on the professional’s interest in looking beyond the pathology, as well as just one organ.

Still, with regard to the altered lingual frenulum, some professionals believe that some difficulty may appear in the child’s speech, not alluding to the difficulties in breastfeeding.

Below is an excerpt from the professional P1, which denies the complaint by mothers of babies with lingual frenulum altered in breastfeeding, elaborating that they only perceive the alteration later:

“It will depend on the mother, if one... so much that has babies that the mother will only realize that he has the short frenulum when he will start talking. Until then, it is not noticed, that he has this problem, you know? Because most of the time, as I told you, there are some cases that the mother does not bring back to the pediatrician because the pediatrician does everything, right, the necessary exams on the baby, sees everything that can be happening to him, right? [...] there are some cases as soon as the mother notices when the baby starts there a year later

when he starts to talk, so she will notice that there is something wrong with his tongue.”

P1

We can also observe in the statement above that often the complaint or symptom occurs in speech and only then is observed by the mother of the baby, which allows inferring that she had no complaints in the period that breastfed her child, or that did not link between possible breastfeeding difficulties and altered lingual frenulum.

“It’s an area like that, which is well ... how can I say? Controversy, because some believe that it influences, [...] There are some cases that are very difficult for the development of the speech, for articulatory point, then, had these controversies, which influenced a lot and that did not influence. So I think it is more according to the area of action, thus, in relation to breastfeeding or relation to speech.”

P10

P10 explains the controversy surrounding this subject because some professionals consider that the shortened frenulum will have a negative influence on the speech of the child, and others believe that there is no relation. This controversy arises mainly in difficult and non-evolving cases, leading the therapist to think of an organic impairment in the child, in this case, the shortened frenulum. The participant also relates the opinion of the professional with their area of action, as a factor of influence for the possible existence or not of compromise due to the altered lingual frenulum.

Participants P2 and P7 believe that the altered lingual frenulum will interfere more specifically in the speech of the child, and participant P10 reports that in their practice they observe difficulty in some isolated phonemes:

“I do not know how to confirm it, but I thought more about his speech, but in the initial phase I do not know to assure you, but in the matter of pulling, that he interferes with the language, right? It could be an issue. I’d be more on the speech line.”

P2

“The baby is born, right, and that if it is not cut at the moment it is born then it will have some difficulties, right, in the diction of the child.”

P7

“[...] as I said, right, unlike what I find in my office, that patient who has difficulty with the “l” or “r”, which sometimes has a lot of influence because of the insertion because it is shorter.”

P10

Studies indicate that the altered frenulum will not always cause alterations in speech, and this index is around 50% of those affected by this alteration.<sup>25</sup>

The low occurrence of change is explained in the statement of P16:

“But so, it’s ... I have never heard of it, it’s so because of having the ... (shortened frenulum). So we did not hear about it. I think so, that does not make much difference from now and before, we hardly saw it. If it was something that harms the child even later, there would be plenty of people like that, right? Speaking wrong, trouble, right? And there’s none. So I, in my opinion, do not think I need to.”

P16

The participant P9 considers that, as discussed above, the shortened frenulum will not necessarily influence the speech of the child, but it relates to the evaluation performed in newborns as having more importance in breastfeeding.

“[...] one cannot, in my conception, it can not be said that the short frenulum will actually influence in the future, in the matter of speech, because the first evaluation there is with the part of breastfeeding, right.”

P9

The interference of the frenulum in speech is also a matter of discussion regarding the referral to perform the frenotomy even as a baby since it is not possible to affirm that these babies will have alterations in speech afterward.

The contradiction observed in the discourse of health professionals is explicit in this thematic nucleus. Considering professional counseling as fundamental for nursing mother and newborns to have the necessary support for the development and maintenance of breastfeeding, it is possible to affirm that this disarticulation is detrimental to the dyad, and may interfere with and hinder decisions regarding breastfeeding.

### *Criteria for indication by professionals for the frenotomy procedure*

In this thematic nucleus, we observe the great contradiction that exists in the report of the professionals regarding the indication for the performance of the frenotomy, because we can see that several divergent opinions emerge.

In the report of P6, we observed the concern with the performance of the intervention as soon as possible:

“Oh... I think yes... right... the whole question I think of breastfeeding, everything right there... until the resourcefulness later when you start wanting to talk everything... well I think. And I think so, the younger [you do the intervention], always better right... suffer less the poor thing.”

P6

Many professionals refer to the great dissemination that the “Tongue Test” has had among health professionals, reporting how in the past they had no access to these cases and explaining the difficulties of the time to refer these babies to frenotomy.

“It always has, always has. Until a while ago we did not hear about this, right [...] but now that we have contact with these babies of these mothers that we attend, practically, like, I think we should have what? About 2 or 3 a month here to do the procedure that the doctor does there.” [talking about the frenotomy]

P1

“Is, the greatest challenge, right, before the law was the referral of these babies to do surgery that was outside, was in Curitiba, was not evaluated by the pediatrician at the maternity, then they were discharged with this, with that, with this problem of the tongue and the difficulty in resolving their problem, with regard to surgery, which is such a simple procedure and that it became such a prolonged thing for the mother, difficult, that she had to go outside to do, you know? “

P3

The participant P5 brings in her report another opinion regarding the referral to frenotomy, according to the vision of the team that works with her, and also demonstrates a low occurrence of cases in her work environment:

“[...] but now recently you do not have much. Even one of the issues these days we were talking about, right? I used to talk about this issue of releasing frenulum, sucking difficulty, all of this, then I even asked once [...] the doctor, the pediatrician who worked here, I said “ours, but I do not see anymore making the cut, right?” and then they put it that it’s something that’s going out of line, that it does not have the need for you to be, it’s ... exposing the child to this pain, right?”

P5

In the discourse of the professionals who participated in the research, it was possible to observe divergent opinions regarding the referral to perform the frenotomy, revealing that often this

decision is actually based on personal criteria of the professional. It is worth noting the importance that, although some professionals participating in the research do not act directly in the referral of infants to the frenotomy, everyone should possess basic knowledge for assertive conduct and favor the early diagnosis of alterations in the lingual frenulum and/or positively promote the breastfeeding process.

The participant P3 reports on babies who present the shortened frenulum, but are not having difficulties in breastfeeding, explaining that she would not do the referral to perform the frenotomy in this baby:

“You have to evaluate later, it’s... other processes, it’s not only breastfeeding but then, the condition of speech, the general development of the baby, I think that who will evaluate there will be a pediatrician, an SLP, right? Maybe at the moment, I would not referral, no.” [talking about babies with short frenulum without difficulty in breastfeeding].

P3

There is a personal account of participant P11, who had the problem diagnosed in her daughter but did not do the procedure to release the frenulum.

“What I knew, when my daughter had a tongue-tied, right, the short frenulum, I took her to the SLP, when she was already six months old, “what do I do, she’ll have trouble speaking?” he said so, “No, if she can easily put the tip of her tongue in the roof of her mouth, no problem at all.” The only difficulty is when it is too short and she can not put the tip of her tongue, protrude the tip of the tongue, then you have to give a cut to be able to move that tongue better, but if you do not have it, there is no need to interfere, okay? So it turns out that I did not even cut her frenulum, so why go through it, nonsense right? “

P11

It is interesting to note that this participant did not complain about breastfeeding in her report, aiming her concern for speech.

Exclusive breastfeeding, as it is possible to observe, does not depend solely on factors that involve the type of frenulum, but on several others that may influence the woman’s decision to introduce the bottle. P3 discusses this:

“[...] Then some, it is, they do not want because they still have that myth of the sagging breast, it lowers their self-esteem, just as there are those insecure teenagers who find difficulty where it does not exist because they do not want to breastfeed. Or by shame, because they are immature, they don’t want

to expose themselves in a public place, right? [...] And there are those mothers who already have more experience of others, other children, breastfeed, without a problem. I think that the thing that really gets in the way of breastfeeding is the myths that have of grandpa, grandma, that is, it is more distracting than it helps, right? They do not let her feed right, so everything that is related to the postpartum. And here comes the breastfeeding, do it, do that, they do not guide I think the family too, and when it is not instructed, oriented, they (the family) greatly hinders this process there from the mother in the postpartum. And it interferes with breastfeeding too, right? The postpartum for the mother is not easy, that is [...] a global thing, it does not have that routine, it's a lot of visitors, lots of people at home, and nobody understands that she's in a period that the routine has changed, and needs a quiet, calm place to breastfeed, that has to take care of the breast, the baby, right? So it's all this, it is, if you do not have a quiet environment, a family that collaborates, it will not succeed, it's difficult, right? "

P3

The participant P9 assumes that if the dyad is successfully breastfeeding, this baby will not necessarily have the shortened frenulum. Despite this, it is imperative to emphasize that this relationship is not straightforward and that there are those babies with alterations who can perform breastfeeding.

"Actually it's like that, because usually the question so, if I see that the baby is already really suckling well, that usually like that is already two, three months, sucking well and everything, I end up not doing, because, does not justify making an evaluation knowing that he is already three months sucking super well. So, he does not have a short frenulum, does he?"

p9

The study of Chaves found a prevalence of breastfeeding difficulties in 40.5% of the sample, and of these mother/baby binomials, no baby presented alteration in the frenulum, using for the evaluation of these binomials the Protocol for evaluation of the lingual frenulum for infants.<sup>5,10</sup>

The only baby in this study who presented altered frenulum had no difficulty in breastfeeding. Below we see the report of the participant P12, who demonstrates to be in favor of the release of the frenulum through the frenotomy.

"I think in some cases yes, some cases so we see the child in the physical examination that has the short frenulum, that we release, improve a lot."

P12

The participants P16 and P9 discuss the criteria used to indicate the frenotomy and the classification of the frenulum as shortened used in their services.

"[...] I think that in my conception, I think it's more the visual issue, the doctor looks and sees if it's short or not, I think the main one, I don't know, would have to check with her, but I believe it is more the observation of the frenulum and see if it is short or not. That sometimes the frenulum comes too far ahead, that little skin comes in the anterior part of the floor of the mouth, so I think it's more or less her assessment, because sometimes I, say, I went to see there, I asked her to observe, because I had never seen what it was like to do, [...] and I went there sometimes to observe what she used and everything else, sometimes it is this issue of the frenulum being a little bit more anterior, [...] and now, if she relates that to breastfeeding, I do not know. I've heard mothers saying that was nursing well, so I do not know what the criterion really is."

p9

"Whenever children have (shortened frenulum), the child can not put out the tongue, [...] it is not that pointy tongue, that tongue that comes out. It gets a tongue like that, rounded, and I see it, so the child opens his mouth, but you see that the tip of the tongue instead of coming out, it kind of folds, you know? Then the child does not succeed. And then we see that it is a very fine skin underneath, right, of the tongue, and it is almost transparent that skin, and if we did not know would not see that, I think so, a person who has never heard of it, can look in the mouth of the child and will not see it, right?"

P16

The criterion used in the services where these professionals work is mainly visual, observing the aspect and format of the tongue. Despite the "Protocol for evaluating the lingual frenulum with scores for infants", commonly known as "Tongue Test" being guaranteed by law, the criteria adopted by health professionals, observed in their reports, are not fully standardized, as advocated by the Protocol.<sup>5</sup> In the service in which the study took place, those who perform the evaluation of the lingual frenulum are the speech therapist, pediatrician, nurse, and nursing technician.

Considering that the first alteration that can hypothetically be observed in the newborn with tongue-tie is breastfeeding, let's see the following report:

"So some of them I already asked if they had a problem with breastfeeding and they said no, but they were there to make the incision, so I do not

really know which was [the criterion for the indication of the frenotomy], if it was just the matter of observing.”

P9

From this report, we can observe the great mismatch that occurs in this service, since babies without difficulty in breastfeeding would not have an immediate need to perform the procedure. According to some authors, the chance of these children presenting alterations in speech is around 50%.<sup>25</sup> The alteration in speech will only be visible once the child begins to speak. Therefore, it is not possible to identify which criterion was adopted for the referral of these infants to perform the frenotomy.

### Final considerations

In view of the statements of the participating professionals, it was found that there is no consensus on the understanding of the relationship between breastfeeding and the lingual frenulum.

### References

1. Brasil. Ministério da Saúde (BR). Portaria nº 693, de 5 de julho de 2000. Brasília (DF): Ministério da Saúde; 2001.
2. Casagrande L, Ferreira FV, Hahn D, Unfer DT, Praetzel JR. Aleitamento natural e artificial e o desenvolvimento do sistema estomatognático. *Rev Fac Odontol PAlegre*. 2008; 49(2): 11-7.
3. Martinelli RLC, Marchesan IQ, Rodrigues AC, Berretin-felix G. Protocolo de avaliação do frênulo da língua em bebês. *Rev CEFAC*. 2012; 14 (1): 138-145.
4. Srinivasan A, Dobrich C, Mitnick H, Feldman P. Ankyloglossia in breastfeeding infants: the effect of frenotomy on maternal nipple pain and latch. *Breastfeed Med*. 2006; 1(4): 216-24.
5. Martinelli RLC, Marchesan IQ, Rodrigues AC, Berretin-felix G. Protocolo de avaliação do frênulo lingual para bebês: Relação entre aspectos anatômicos e funcionais. *Rev CEFAC*. 2013; 15 (3): 599-610.
6. Marchesan, IQ. Protocolo de avaliação do frênulo da língua. *Rev CEFAC*. 2010; 12 (6): 977-89.
7. Brasil. Lei nº 13.002/14 de 20 de junho de 2014. Dispõe sobre a obrigatoriedade da aplicação do Protocolo de Avaliação do Frênulo da Língua em Bebês. *Diário Oficial da União, Brasília, DF*, 20 jun. 2014.
8. Martinelli RLC, Marchesan IQ, Lauris JR, Honório HM, Gusmão RJ, Barretin-felix G. Validade e confiabilidade da triagem: “teste da linguinha”. *Rev CEFAC*. 2016; 18(6): 1323-31.
9. Ricke LA, Baker NJ, Madlonkay DJ, Defor TA. Newborn tongue-tie: prevalence and effect on breast-feeding. *J Am Board Fam Med*. 2005; 1 (18): 1-7.
10. Fujinaga CI, Chaves JC, Karkow IK, Klossowski DG, Silva FR, Rodrigues AH. Frênulo lingual e aleitamento materno: estudo descritivo. *Audiol Commun Res* 2017; 22 (e1762): 1-7.
11. Martinelli RLC. Relação entre as características anatômicas do frênulo lingual e as funções de sucção e deglutição em bebês. [Dissertação] Bauru: Faculdade de Odontologia de Bauru – USP; 2013.
12. Souza CB, França EC, Alves ILF, Machado JP. Implantação do teste da linguinha no centro de referência em saúde auditiva/CREASA/PUC Goiás. *Rev. Frag de Cultura*. 2014; 24 (especial): 51-6.
13. Almeida JM, Luz SAB, Ued FV. Apoio ao aleitamento materno pelos profissionais de saúde: revisão integrativa da literatura. *Rev Paul Pediatr*. 2015; 33(3): 355-62.
14. Araújo OD, Cunha AL, Lustosa LR, Nery IS, Mendonça RCM; Campelo SMA. Aleitamento materno: fatores que levam ao desmame precoce. *Rev Bras Enferm*. 2008; 61 (4): 488-92.
15. Nelas P, Coutinho E, Chaves C, Amaral O, Cruz C. Dificuldades na amamentação no primeiro mês de vida: impacto dos contextos de vida. *INFAD Revista de Psicologia*. 2017; 2 (1): 183-92.
16. Organização mundial da saúde (OMS). Uma declaração conjunta OMS/UNICEF - proteção, promoção e apoio ao aleitamento materno: o papel especial dos serviços materno-infantis. Genebra; 1989.
17. Manzini EJ. Entrevista semiestruturada: análise de objetivos e de roteiros. *Anais do 2. Seminário internacional sobre pesquisa e estudos qualitativos; 25 a 27 março 2004, Bauru (SP): USP Bauru; 2004*.
18. Minayo CMS. O desafio do conhecimento: Pesquisa qualitativa em saúde. Rio de Janeiro: Hucitec; 2006.
19. Brito SF, Marchesan IQ, Bosco CM, Carrilho ACA, Rehder MI. Frênulo lingual: classificação e conduta segundo ótica fonoaudiológica, odontológica e otorrinolaringológica. *Rev CEFAC*. 2008; 10 (3): 343-51.
20. Pereira RSV, Oliveira, MIC, Andrade CLT, Brito AS. Fatores associados ao aleitamento materno exclusivo: o papel do cuidado na atenção básica. *Cad Saúde Pública*. 2010; 26 (12): 2343-54.
21. Almeida IS, Ribeiro IB, Rodrigues MRD, Costa CCP, Freitas NSF, Vargas EB. Amamentação para mães primíparas: perspectivas e intencionalidades do enfermeiro ao orientar. *Cogitare Enferm*. 2010; 15 (1): 19-25.
22. Garbin CP, Sakalidis VS, Chadwick LM, Whan E, Hartmann PE, Geddes DT. Evidence of improved milk intake after frenotomy: a case report. *Pediatrics*. 2013; 132 (5): 1413-7.
23. Brasil. Ministério da Saúde (BR). Portaria nº 155, de 14 de setembro de 1994. Brasília (DF): Ministério da Saúde; 1994.
24. Geddes DT, Kent JC, McClellan HL, Garbin CP, Chadwick LM, Hartmann, PE. Sucking characteristics of successfully breastfeeding infants with ankyloglossia: a case series. *ACTA Paediatr*. 2009; 99: 301-3.
25. Marchesan IQ, Teixeira NA, Cattoni DM. Correlações entre diferentes frênulos linguais e alterações na fala. *Distúrb. comun*. 2010; 22 (3): 195- 200