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## **Marzena Machoś: Short lingual frenulum in newborns and infants diagnosis and treatment GooGoo 2020 Publishing**

“Short lingual frenulum in newborns and infants – diagnosis and treatment” is the latest book by Marzena Machos, PhD. The author undertook the subject which is important for a group of ENT specialists, speech therapists and neurologopedists. However, she also presented and justified the importance of the topic from a broader medical perspective, thus expanding the list of recipients with lactation advisers, orthodontists, paediatricians, physiotherapists, early support therapists and all specialists who present a holistic approach to the assessment of the patient’s condition. The publication is characterized by a high scientific value, accuracy of description and an original way of presenting the topic.

In the first part of the book, the author refers to the literature dealing with the lingual frenulum. The Polish literature contains numerous descriptions of the examination of tongue mobility, the test which is used to evaluate the frenulum in older children. Specialists in the broad issue of the speech development, with no hesitation, cite the publications by Barbara Ostapiuk as a reliable source of the tongue mobility assessment. Danuta Pluta-Wojciechowska provides a description of the procedure for examining the frenulum in infants. Tomasz Sioda supplements this description and draws attention to the aspect of inheriting the short frenulum. The author also mentions English-language references. This short overview is the basis for further considerations and a lodestar for those interested in this subject. According to the introduction, the publication is not only the result of an in-depth analysis of the available research, but above all a summary of diagnosis, observation and treatment of 118 infants with

ankyloglossia. It is worth mentioning that at the time of releasing this book, the author published another item "Short lingual frenulum in newborns and infants – examination protocol". This information is essential because each point of the protocol has been thoroughly described and explained in the book. The protocol contains observation cards, to which the book refers by giving detailed instructions. By placing the protocol cards on the last pages of the book, the author ensured the reader an access to this material which is useful when studying the content of the book.

*A few words about the frenulum.* A short presentation of the issues discussed by the author will highlight the complexity of the subject. There are five frenuli in the mouth: lingual frenulum, frenulum of the upper lip, frenulum of the lower lip and buccal frenulum. The structure and attachments of the frenulum are also important. The tongue is an anchored muscle, and therefore it has its own frenulum, which is a remnant of the process of separating the tongue from the floor of the mouth. The structure of the frenulum can vary individually. A short lingual frenulum is one of the most common diagnoses made by speech therapists in newborns suffering suction disorders. According to the author, the knowledge of the structure of the oral cavity and its elements is crucial for assessing the limitations caused by a short lingual frenulum. Although the diagnosis of ankyloglossia is made both in children and adults, the correct structure of the frenulum is particularly important in the neonatal period and infancy. A short lingual frenulum may cause difficulties in maintaining the resting position of the lips and tongue, digestion and postural development. A diagnosis of ankyloglossia is of key importance for proper feeding of infants because the condition results in the improper handling and transport of food. Sucking the breasts involves a complicated process of integrating the activity of the muscles of the tongue which perform several different movements simultaneously: holding the nipple, generating negative pressure in cooperation with the cheeks, making movements forward and towards the throat. A little child has to face two challenges, firstly, ensuring the correct function of the tongue, secondly, coordination of sucking, breathing and swallowing. A short frenulum causes abnormalities in primary functions and their transformation into parafunctions. In older children, the condition has a negative impact on articulation. This is due to the fact that sucking the breasts in the neonatal period and in early infancy is a training for food intake with a spoon and cup, with the entire period of infancy being an introduction to learning speech.

A diagnosis of the short frenulum is made by inspection and palpation. In the next part of the book, Marzena Machos thoroughly presents the observation protocol making numerous digressions and describing the subsequent parts of the protocol. The analysis covers the resting position of the lips and tongue, the impact of breathing on the development of orofacial syndrome, the motor function of the tongue and the place of attachment of the lingual frenulum. All these areas are described along with the basic principles and technical difficulties in performing the examination, and this is an extremely valuable part for practitioners. The next step is to observe the baby while feeding; this part is widely illustrated with photos and detailed descriptions. Whoever participated in the author's training understands the importance of reflexes, which have also been described in detail. The author's great experience in the multidimensional perception of reflexes make all her comments valuable hints for specialists. The book also presents the information on enriching a diet of small patients, as well as contains the indications for working with a child after phrenotomy, i.e. undercutting the lingual frenulum.

The author in a simple and professional manner complements and clarifies the knowledge of short frenulum. These two adjectives are not mutually exclusive; the use of this kind of language is extremely valuable. The latest book by Doctor Marzena Machos allows the reader to assimilate the material in a very illustrative way, not only thanks to descriptions, but also numerous photos and illustrations. The paper documents the diagnosis and treatment of 118 cases, which is particularly important and valuable, because such a research group is still a rarity among Polish speech therapy studies. We would like to warmly thank the author for sharing her workshop in such a detailed and orderly manner.

Dear readers of the book "Short lingual frenulum in newborns and infants", please appreciate also the aesthetic aspect of the publication. This review confirms the great value of the publication which contains three hundred pages of ready-made exercises and recommendations on how to prepare parents and a young patient for the diagnosis and the procedure of phrenotomy. The book meets the highest standards of quality and aesthetics in terms of editing. The recurring theme of pastel colours, consistent graphic design, the use of a symbol of string to illustrate the frenulum and the presentation of study results on cards confirm careful and insightful preparation of the publication on every level. Without a doubt, all these aspects help a reader assimilate and remember the content of the book.

If you follow the scientific activity of the author, it is easy to notice the characteristic graphic aspect which is consistent with her previous publications. Thus, the book is a continuation of the previous works of the author. The drawings allow to recognize Dr Marzena Machos' books by style. We can conclude that the Doctor created her own unique publication brand.

I recommend the book "Short lingual frenulum in newborns and infants - diagnosis and treatment" for specialists to enrich their workshop and use the recommendations and advice in practice. A correct diagnosis of ankyloglossia, made with the help of this publication, gives little patients a chance for the harmonious and undisturbed development. For parents, the book provides support and understanding, as well as explanation of the difficulties they encounter when feeding their babies.