

Clinical Perspective

The “interdisciplinary orofacial examination protocol for children and adolescents”: a resource for the interdisciplinary assessment of the stomatognathic system

Diana Grandi (*College of Speech Language Therapists of Catalonia*)

Suggested Citation

Grandi, D. (2012). The “interdisciplinary orofacial examination protocol for children and adolescents”: a resource for the interdisciplinary assessment of the stomatognathic system. *International Journal of Orofacial Myology*, 38(1), 15-26.

DOI: <https://doi.org/10.52010/ijom.2012.38.1.3>



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

The views expressed in this article are those of the authors and do not necessarily reflect the policies or positions of the International Association of Orofacial Myology (IAOM). Identification of specific products, programs, or equipment does not constitute or imply endorsement by the authors or the IAOM. The journal in which this article appears is hosted on [Digital Commons](https://digitalcommons.elsevier.com/), an Elsevier platform.

THE “INTERDISCIPLINARY OROFACIAL EXAMINATION PROTOCOL FOR CHILDREN AND ADOLESCENTS”: A RESOURCE FOR THE INTERDISCIPLINARY ASSESSMENT OF THE STOMATOGNATHIC SYSTEM

DIANA GRANDI, MS, SLP

ABSTRACT

The Interdisciplinary Orofacial Examination Protocol for Children and Adolescents (**Protocolo de exploración interdisciplinaria orofacial para niños y adolescentes**, Barcelona, 2008) is very useful in providing a fast, initial, expedient detection of possible morphological and functional disorders, and to guide the patient toward the appropriate professionals. With this tool it is possible to detect the risk factors which can negatively affect morphological and functional harmony and guide patients toward the necessary treatment as early as possible. This Protocol, developed by 4 orthodontists, 1 ENT and 3 speech language therapists, also contributes to the unification of concepts and nomenclature used by distinct specialists, thus making professional understanding easier and more dynamic.

KEY WORDS: Detection, orofacial dysfunctions, protocol, interdisciplinary orofacial examination, multidisciplinary assessment

INTRODUCTION

The intervention to treat alterations and dysfunctions of the stomatognathic system (SS) isn't always conducted at the most opportune moment, since the patient often arrives after their dysfunctions have been present for some time. Also, these dysfunctions may have led to a dental malocclusion or aggravated a pre-existing malocclusion. On the other hand, one of the most serious difficulties frequently experienced by the different professionals who work with the stomatognathic system is the absence of a common interdisciplinary code, be it for the patient evaluation or establishing of a course of action. Certainly, diagnosis and treatment would be easier with an interdisciplinary detection of the morphological alterations and dysfunctions of the stomatognathic system, as well as a common interdisciplinary terminology and classification system.

To facilitate the achievement of these goals, a resource was created by a team of professionals from Barcelona in 2008. The

team consisted of an ENT (Jordi Coromina), four orthodontists (Pablo Echarri, Alberto Carrasco, Elsa Bottini & Emma Vila) and three speech language pathologists (Graciela Donato, Lyda Lapitz & Diana Grandi) who live in Catalonia, Spain. This resource, the *Interdisciplinary Orofacial Examination Protocol For Children and Adolescents* was designed for the fast, easy detection of possible morphological alterations and orofacial dysfunctions of the SS. It was not intended to be a diagnostic tool, but simply an aid for initial detection. After this initial detection, the patient can be directed to the appropriate professional/s responsible for conducting both the diagnosis and treatment.

This protocol was first introduced at the 5th Speech Therapy and Odontology Workshop at the Mediterranean Dentistry Forum in Barcelona, January 2009. Since that time it has become widely used by professionals from diverse disciplines, especially odontologists, ENTs, paediatricians and

speech therapists. It is also a very useful resource for speech therapists who are not specialized in the orofacial myofunctional area.

In August 2010, the Protocol was presented at the 39th Convention of the International Association of Orofacial Myology (IAOM) held in Sao Paulo, Brazil. It was well received by attendees, who inquired of members of the Convention Committee as to how the Protocol could be obtained for their use. For this reason and with great pleasure, the authors would like to share it with all the members of the IAOM, as well as any other professionals who would like to use it. It is hoped that this will help facilitate detection, diagnosis and treatment of stomatognathic system alterations and dysfunctions, while promoting further interdisciplinary study and investigation in this field.

INSTRUCTIONS FOR USING THE PROTOCOL

The Protocol is a two page document consisting of 13 items (aside from items pertaining to personal information such as name, age), that can be quickly completed. Its sole requirement is clinical observation, as it includes no other types of exploration or examination. The Protocol for Children and Adolescents is provided in Appendix A and the different items and their use are described in this article, accompanied by some graphics to aid in observation and use. The adult version of the Protocol is provided in Appendix B.

The alteration of a factor is cause for referral to different professionals. So, for each of the 13 factors or items, consideration is given to which professional the patient should be referred.

The authors have also codified the different

factors, giving each a specific point value. This is not necessary to do at the time the Protocol is completed, but is of use for the diverse scientific studies that may be conducted thereafter. A value of 0 is given to those factors which exhibit no alteration, while other codes are used to assign a value to the alterations of distinct factors.

1. Parents Anamnesis:

This section consists of 12 questions which are intended to obtain basic information about possible key signs related to the SS, such as type of respiration, presence of deleterious sucking habits and phono-articulatory disorders. Responses to these questions may be: Yes, No or Unknown.

Patients with alterations in questions 1 to 9 must be directed to an ENT, pediatrician and/or speech therapist. Patients with alterations in question 10 must be directed to an odontologist and a speech therapist. Patients with alterations in questions 11-12 must be directed to a speech therapist. The point system assigns a value of 0 to answers of "No", a value of 1 to answers of "Yes", and a value of 2 to answers of "Unknown".

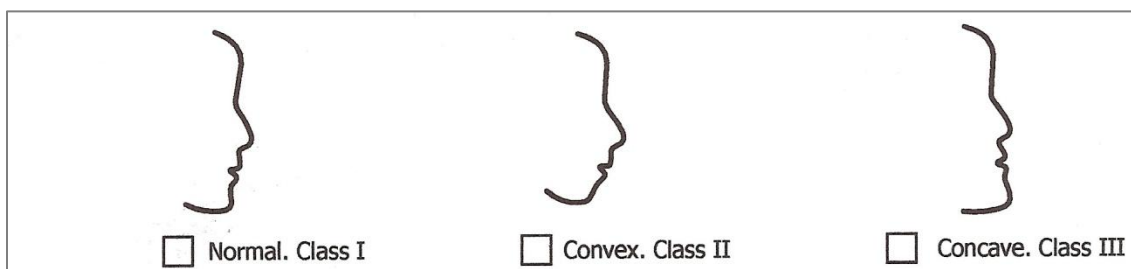
2. Breathing:

This section focuses on determining the patient's respiratory pattern: nasal, oral or mixed. The respiratory pattern may be modified due to obstructions or habits, which puts in motion a chain reaction of alterations that affect the SS; which may in turn, affect the patient's quality of life and craniofacial growth and development.

Patients with respiratory alteration must be directed to an ENT and a speech therapist. The point system assigns a value of 0 to nasal respiration, a value of 1 to mixed respiration, and a value of 2 to oral respiration.

3. Profile:

Three types of facial profiles are considered, based on the profile classification conducted by Dr. Arnett (1993).



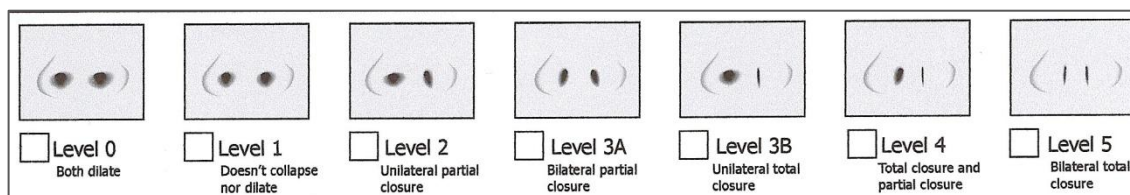
Patients with profile alteration must be directed to an odontologist. The point system assigns a value of 0 for a profile of Class 1 (normal), a value of 1 for a profile of Class II (altered), and a value of 2 for a profile of Class III (altered).

4. Nostril configuration (with forced breathing):

This section evaluates the configuration of the nostrils according to the degree of nasal collapse, as described by Dr. Durán (2003), in function with the activity of the nostrils during forced inhalation:

- Level 0: Bilateral dilation of the nostrils in inhalation
- Level 1: Neither dilation nor collapse of the nostrils in inhalation

- Level 2: Partial unilateral collapse in inhalation
- Level 3: Partial bilateral collapse (3-A) or total unilateral collapse (3-B) in inhalation
- Level 4: Total unilateral collapse of one side and partial collapse of other side in inhalation
- Level 5: Total bilateral collapse in inhalation



Patients with nostril alteration must be directed to an ENT, a speech therapist and an odontologist. To assign a point value, we use the same levels as Dr. Durán (2003).

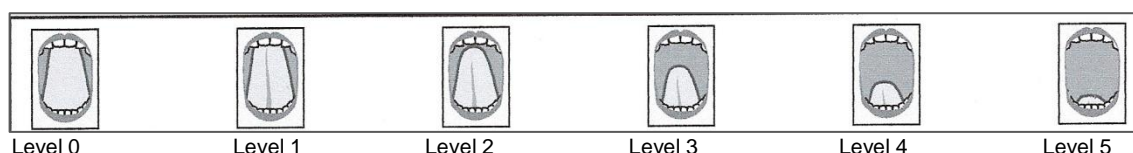
5. Inferior lingual frenum:

Dr. Durán's (2003) codification system, is used which presents five degrees of lingual mobility and a value of zero for complete absence of a problem, as a function of the height to which the tip of the tongue reaches when the mouth is open:

- Level 0: Previous Frenectomy
- Level 1: Tip of the tongue touches the palate behind the upper incisors at maximum mandibular opening

Level 2: Tip of the tongue almost touches the palate behind the upper incisors at maximum mandibular opening

- Level 3: Distance between the upper and lower incisors is the same at maximum mandibular opening
- Level 4: Tip of the tongue reaches lower incisors at maximum mandibular opening
- Level 5: Tip of the tongue doesn't reach lower incisors (very close to ankyloglossia) at maximum mandibular opening



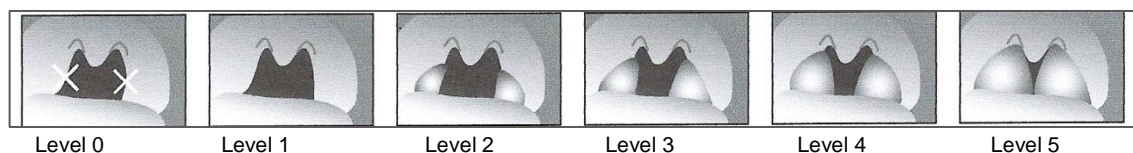
Patients with alterations in lingual mobility must be directed to a speech therapist and ENT. We assign values according to Dr. Durán's (2003) 5 level codification.

6. Tonsils:

Tonsil size is encoded in a 5 level system, including a level of 0 for the total absence of a problem (tonsillectomy), in function with the relation to the pharyngeal space where:

- Level 0: Previous tonsillectomy
- Level 1: No visible tonsils
- Level 2: The tonsils are very small (<25% of the pharyngeal space)

- Level 3: Tonsils occupy 1/3 of pharyngeal space (25-50%)
- Level 4: Tonsils occupy 2/3 of pharyngeal space, although they do not quite touch along the medial line (50-75%)
- Level 5: Tonsils occupy 3/3 of pharyngeal space and touch one another (>75%)



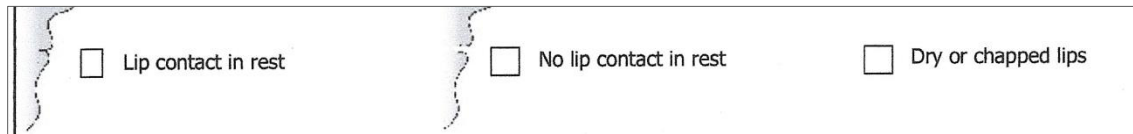
Patients with alteration in tonsil size must be directed to an ENT. We assign values according to Dr. Durán's (2003) 5 level codification.

7. Lips:

Lip relationship is examined. An upper/lower ratio of 1/3 to 2/3 is considered normal.

Also considered are:

- Incompetent upper lip at rest (no contact with the lower)
- Dry, chapped lips.



Patients with lip alteration must be directed to an odontologist and a speech therapist. The point system assigns a value of 0 if there is contact when the lips are at rest, 1 if there isn't lip contact at rest, and 2 to dry or chapped lips.

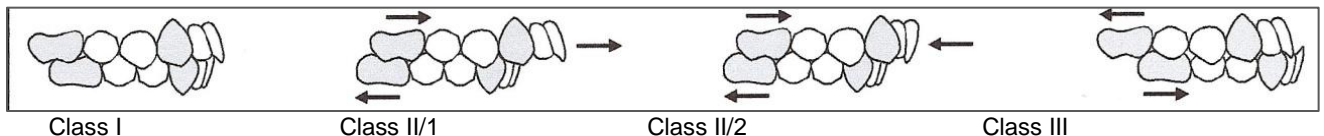
8. Malocclusion (Angle, 1907):

Class I (normal): The mesiolabial cusp of the first upper molar occludes in mesiolabial sulcus (groove) of the first lower molar. The upper canine occludes between the distal side of the lower canine cusp and mesial side of the first lower molar cusp. The incisors present an overbite or 2-3 mm of anteroposterior difference (upper incisor is in advanced position in relation to the lower incisor).

Class II/1: The upper first molar, canine and incisors are in advanced position in relation to the lower ones.

Class II/2: The upper first molar and canine are in advanced position in relation to the lower ones. The upper central incisors are tipped towards the palate.

Class III: The upper first molar, canine and incisors are in a backward position in relation to the lower ones.



Patients with occlusal alteration must be directed to an odontologist. The point systems gives a value of 0 to a malocclusion of Class I, a value of 1 to a malocclusion of Class II-1, a value of 2 to a malocclusion of Class II-2, and a value of 3 to a malocclusion of Class III.

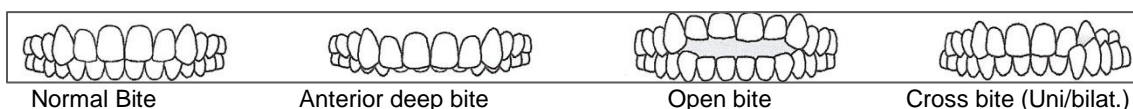
9. Bite Occlusion:

Occlusal alterations are examined from a vertical and transverse point of view.

On the vertical plane, identify if there is:

- Anterior deep bite: upper incisors cover more than 2-3 mm of the lower
- Open Bite: upper incisors cover less than 0 mm of the uppers

- On the transverse plane, identify if there is Cross Bite (uni or bilateral):
- the labial cusp of the premolars or the upper molars occludes inside the labial cusp of the lower molars



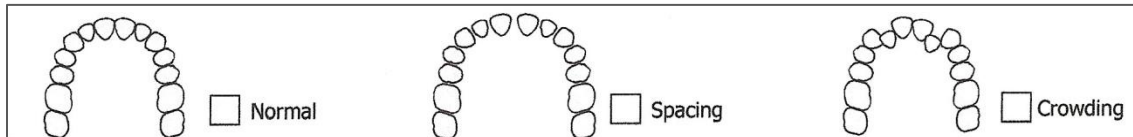
Patients with altered bite must be directed to an odontologist. The point system assigns a value of 0 to a normal relation, a value of 1 to an Anterior deep bite, a value of 2 to an Open Bite, and a value of 3 to a Cross Bite (uni or bilateral).

10. Alignment:

Normal: Teeth are correctly positioned, aligned in their basal bone. There is neither excessive space nor over-crowding.

Spacing: There are spaces or diastema between the teeth

Crowding: The space available to the dental arches is insufficient and the teeth are crowded.



Patients with altered dental alignment must be directed to an odontologist. The point system assigns a value of 0 to normal alignment of the arches, value 1 to alignment with spacing, and value 2 to alignment with crowding.

11. Swallowing:

Around 4 years of age, swallowing patterns reach maturity, exhibiting characteristics similar to those of an adult: lip seal, contact between tongue and palate, and lack of peribuccal tension or contraction. When these characteristics are not present, the result is so-called dysfunctional or atypical swallowing, the most common signs of which are:

- interposition of tongue between the dental arches
- tongue thrust against the upper or lower dental arch
- upper incisors above the lower lip
- contraction of peribuccal musculature, among others.

In accordance with the objective of this protocol, in order to conduct a quick and easy observation of swallowing, one must be aware of the following requirements: the

patient sits or stands (the torso is in a vertical position) while the examiner looks for the natural pattern of swallowing (while speaking, drinking water, etc).

With this protocol, the presence of alterations in swallowing is examined using two easy observations which are :

- Does the patient make a face when swallowing?
- Is there interposition of the tongue or lip when swallowing?

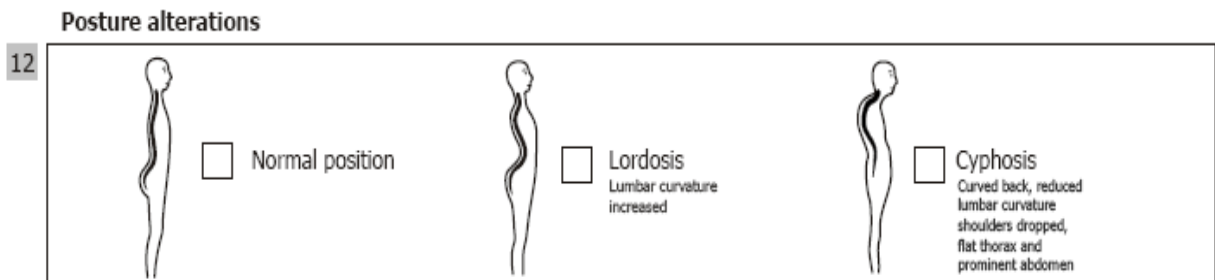
Patients with altered swallowing must be directed to a speech therapist. The point system assigns a value of 0 for normal swallowing, a value of 1 when the patient makes faces while swallowing, and a value of 2 when we observe tongue thrust or lip thrust while swallowing.

12. Posture alterations:

Altered posture refers to habits or incorrect habits in posture which result in the imbalance of body musculature. Changes produced in the craniofacial appearance (cervical hyper- or hypo-extension) lead to alterations in the appearance of the mandible.

In the protocol, the posture of the patient is indicated as:

- Normal position
- Lordosis: increased lumbar curvature
- Cyphosis: curved back, decreased lumbar curvature, shoulders dropped, flat thorax and prominent abdomen



Patients with altered posture must be directed to a speech therapist and a paediatrician. The point system assigns a value of 0 for a normal position, a value of 1 for the presence of lordosis or increased lumbar curvature, and a value of 2 for the presence of cyphosis or decreased lumbar curvature.

13. Adenoids:

A phonetic test is given to collect information on the adenoids by asking the patient to repeat a word that contains nasal consonants, for example "morning." This is initially done with the nostrils open and then with the nostrils close (pinched). When the timbre of voice is different the result is normal; when the timbre is the same, the result is altered. The ENTs do the endoscopy and the orthodontists can do the profile X-ray, to see if there is a partial obstruction, severe obstruction, or no obstruction.

A codification system has been developed for the type of professional who must assess the patient: A value of 1 is assigned to the need for assessment by an ENT, a value of 2 is assigned to the need for an assessment by an odontologist, a value of 3 is assigned to the need for an assessment by a speech therapist, a value of 4 is assigned to the need for an assessment by a paediatrician, and a value of 5 is assigned to the need for an assessment by a combination of any of the above.

Patients with alteration in adenoids must be directed to an ENT. The point system assigns a value of 0 to no obstruction, a value of 1 to partial obstruction, and a value of 2 to severe obstruction.

We use the same codification (from 1 to 4) to classify which professional has conducted the study.

14. Recommended assessment by:

Finally, a section is included in which the professional or professionals to whom the patient must be referred for accurate diagnosis and appropriate treatments are identified: ENT, Orthodontist, Speech Therapist, Odontopediatrician.

SUMMARY

The **Interdisciplinary Orofacial Examination Protocol for Children and Adolescents** has been designed and developed as an interdisciplinary resource for the efficient detection of orofacial alert signs. It is an **easy, quick clinical procedure** that **allows us to conduct a patient's initial evaluation**.

The specific objectives of this protocol are:
to determine which specialists from the multi-disciplinary team must intervene first in the patient's diagnosis and treatment in order to facilitate the correction of anomalies and dysfunctions, **to conduct an etiological treatment**, and **to obtain the most stable results**.

This protocol also contributes to the unification of concepts and nomenclature used by distinct specialists in an effort to promote, facilitate and make dynamic their mutual understanding.

CONTACT AUTHOR:

Diana Grandi de Trepà, MS, SLP

Vice Dean of the CLC (College of Speech Language Therapists of Catalonia), Spain

Professor of Courses on Orofacial Myology

Collaborating Professor at the Master of Voice' Rehabilitation (*Escola de Patologia del Llenguatge*, UAB) Collaborating Professor at the Faculty of Odontology (UIC), Spain.

digran@telefonica.net

REFERENCES

Arnett GW, Bergman Rt. (1993) Facial Keys to orthodontic diagnosis and treatment planning-Part I. *American Journal of Orthodontics and Dentofacial Orthopedics*. 103: 299-312.

Arnett GW, Bergman Rt. (1993) Facial Keys to orthodontic diagnosis and treatment planning-Part II. *American Journal of Orthodontics and Dentofacial Orthopedics*. 103: 395-411.

Coromina J, Estivill E. (2006) Tratamiento del niño roncador y/o con apnea obstructiva del sueño: la reducción amigdalar con láser. En: Coromina J, Estivill E. *El niño roncador. El niño con síndrome de apnea obstructiva del sueño*. Barcelona. 2ª Ed. EDIMSA 41-68.

Donato G, Lapitz L, Grandi D. (2009) Protocolo de exploración Interdisciplinar orofacial para niños y adolescentes. *Revista Logopèdia*. Col·legi de Logopedes de Catalunya (16).

Durán J. (2003) Multifunction System "MFS". Las 8 claves de la matriz funcional. *Revista Ortodoncia clínica*. 6: 10-13.

Durán J. (2003) Técnica MFS: Diagnóstico de la matriz funcional: codificación. *Revista Ortodoncia clínica*. 6:138-40.

Echarri P, Carrasco A, Vila E, Bottini E. (2009) Protocolo de exploración Interdisciplinar orofacial para niños y adolescentes. *Revista Ortodoncia Española*, 49 (2); 107-115

Echarri P, Pérez JJ. (2002) Historia clínica, examen clínico y estudio de modelos. En Echarri P. *Diagnóstico en ortodoncia: estudio multidisciplinario*. Barcelona. Nexus, 57-102.

Grandi D, Donato G. (2006) *Terapia Miofuncional. Diagnóstico y Tratamiento*. Ediciones Lebón, Barcelona.

Segovia ML, Infante L. (2001) Disgnacias. En Programa de actualización en Fonoaudiología. Primer ciclo. Módulos 1 y 2. *Editorial Médica Panamericana*, Bs.As. Argentina.

Segre R, Naidich S. (1981) Principios de Foniatría. Editorial Médica Panamericana, Bs.As., Argentina.

Ustrell J, Durán J. (2001) Diagnóstico en ortodoncia. En Ustrell J, Durán *Journal. Ortodoncia*. Primera edición. Barcelona. Editorial Universitat de Barcelona, 61-100.

APPENIX A

INTERDISCIPLINARY OROFACIAL EXAMINATION PROTOCOL FOR CHILDREN AND ADOLESCENTS (For ENT, Pediatricians, Dentists and Speech Therapists)

Authors: Elsa Bottini, Alberto Carrasco, Jordi Coromina, Graciela Donato, Pablo Echarri, Diana Grandi, Lyda Lapitz & Emma Vila.

By:.....Specialty:.....

Patient personal data:

Name:.....Age:.....Date:.....

Sex:.....Weight:.....Height:.....Record:.....

Concept:

Extra and intra-oral interdisciplinary orofacial exploration, which includes the examination to detect possible morphological alterations and/or dysfunctions.

This process entails 2 characteristics:

- 1.Speed (5-8 minutes)
- 2.Simplicity




Parents Anamnesis:

	Yes	No	Don't know
1- Does your child usually snore while sleeping?			
2- Have you noticed that your child has difficulties in breathing or he/she breathes with lots of effort?			
3- Have you noticed in your child while sleeping:			
Break or pause in breathing?			
Restless or agitated sleep?			
Abnormal head postures (hyperextension, etc)?			
Excessive sweating?			
4- Does he/she wet the bed with saliva?			
5- Does he get easily tired after running or doing exercises?			
6- Does your child keep his/her mouth open while watching TV or using the computer?			
7- Does he/she drool during the day?			
8- Does he frequently catch a cold?			
9- Is he/she allergic?			
10- Habits: pacifier / thumb sucking / nail-biting/ cheilophagia / other			
11- Does he/she frequently get voiceless?			
12- Does he/she have pronunciation problems?			








Breathing:

2 ☐ Nasal ☐ Buccal ☐ Mixed

Profile:







3  ☐ Normal. Class I  ☐ Convex. Class II  ☐ Concave. Class III

Nostrils configuration (with forced breathing)

4  ☐ Level 0 Both dilate  ☐ Level 1 Doesn't collapse nor dilate  ☐ Level 2 Unilateral partial closure  ☐ Level 3A Bilateral partial closure  ☐ Level 3B Unilateral total closure  ☐ Level 4 Total closure and partial closure  ☐ Level 5 Bilateral total closure







Inferior lingual frenum (Ask patient to lift his/her tongue with the completely open mouth, and to try to touch his/her palate)

5

					
<input type="checkbox"/> Level 0 Frenectomy	<input type="checkbox"/> Level 1 Tongue tip touches the palate	<input type="checkbox"/> Level 2 Almost touches the palate	<input type="checkbox"/> Level 3 The distance between the upper and lower incisors is the same	<input type="checkbox"/> Level 4 Reaches lower incisors	<input type="checkbox"/> Level 5 Doesn't reach lower incisors



Tonsils

6

					
<input type="checkbox"/> Level 0 Previous tonsillectomy	<input type="checkbox"/> Level 1 No visible tonsils	<input type="checkbox"/> Level 2 Very small tonsils (< 25%)	<input type="checkbox"/> Level 3 Tonsils occupy 1/3 of pharyngeal space (25% - 50%)	<input type="checkbox"/> Level 4 Tonsils occupy 2/3 of pharyngeal space (50% - 75%)	<input type="checkbox"/> Level 5 Tonsils occupy 3/3 of pharyngeal space (>75%)


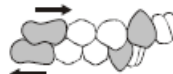
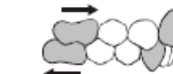

Lips

7

	<input type="checkbox"/> Lip contact in rest		<input type="checkbox"/> No lip contact in rest	<input type="checkbox"/> Dry or chapped lips
---	--	---	---	--

Malocclusion (Angle)

8

			
<input type="checkbox"/> Class I (Normal)	<input type="checkbox"/> Class II/1	<input type="checkbox"/> Class II/2	<input type="checkbox"/> Class III




Bite Occlusion

9

			
<input type="checkbox"/> Normal bite	<input type="checkbox"/> Anterior deep bite	<input type="checkbox"/> Open bite	<input type="checkbox"/> Crossbite (uni./bilat.)

Alignment

10

		
<input type="checkbox"/> Normal	<input type="checkbox"/> Spacing	<input type="checkbox"/> Crowding




Swallowing

11

<input type="checkbox"/> Normal	<input type="checkbox"/> Makes faces while swallowing	<input type="checkbox"/> Tongue thrust or lip thrust while swallowing
---------------------------------	---	---

Posture alterations

12

	<input type="checkbox"/> Normal position		<input type="checkbox"/> Lordosis Lumbar curvature increased		<input type="checkbox"/> Cyphosis Curved back, reduced lumbar curvature, shoulders dropped, flat thorax and prominent abdomen
---	--	---	---	---	--

13 **Adenoids:**

Phonetical test (morning)	<input type="checkbox"/> Positive (different)	<input type="checkbox"/> Endoscopy (only ENT)	<input type="checkbox"/> No obstruction
	<input type="checkbox"/> Negative (same)	<input type="checkbox"/> Profile X-ray (only orthodontists)	<input type="checkbox"/> Partial obstruction
			<input type="checkbox"/> Severe obstruction

Recommended assessment by:

14

<input type="checkbox"/> ENT	<input type="checkbox"/> Orthodontist	<input type="checkbox"/> Speech therapist	<input type="checkbox"/> Odontopediatrician
------------------------------	---------------------------------------	---	---

APPENDIX B

INTERDISCIPLINARY OROFACIAL EXAMINATION PROTOCOL FOR ADULTS
 (For Speech Therapists, Dentists, ENT and General Practitioners)

Authors: Elsa Bottini, Alberto Carrasco, Jordi Coromina, Graciela Donato, Pablo Echamí, Diana Grandí, Lyda Lapitz, Eduardo Padrós, Joan Pau Maró & Emma Vila.

By:.....Specialty:.....

Patient personal data:

 Name:.....Age:.....Sex:.....Date:.....
 Weight:.....Height:.....Occupation:.....Record:.....

Concept:

 Extra and intra-oral interdisciplinary orofacial exploration, including the examination to detect possible morphological alterations and/or dysfunctions.
 This suggestion is an approximation to the exploration protocol which entails 2 characteristics:
 1.- Speed (5-8 minutes)

Anamnesis:

	Yes	No	Don't know
1- Do you usually breathe through the mouth?			
2- Do you snore while sleeping?			
3- Do you have any nasal allergies?			
4- Do you stop or pause your breathing while sleeping?			
5- Do you easily get tired or fall asleep during the day?			
6- Do you have any facial pains?			
7- Do you clench or grind the teeth during the night?			
8- Do you clench or grind the teeth during the day?			
9- Do you usually drink alcohol before going to bed?			
10- Do you gums bleed?			
11- Do you have difficulties in opening or closing the mouth, or while chewing?			
12- Do you use chronical sleep medication?			
13- Do you suffer from hypertension?			
14- Do you regularly practice sports?			
15- Do you frequently get voiceless?			

 Have you already been treated from? ☐ 16 -Apnea ☐ 17- Dental treat. ☐ 18- Orthodontic treat. ☐ 19- Speech Therapy




 Do you use?: ☐ 20- Splint ☐ 21- Removable appliance

2	21- Do you smoke?	<input type="checkbox"/> No	<input type="checkbox"/> -10	<input type="checkbox"/> +10
---	-------------------	-----------------------------	------------------------------	------------------------------








Breathing:

3	<input type="checkbox"/> Nasal	<input type="checkbox"/> Buccal	<input type="checkbox"/> Mixed
---	--------------------------------	---------------------------------	--------------------------------

Profile:







		
<input type="checkbox"/> Normal. Class I	<input type="checkbox"/> Convex. Class II	<input type="checkbox"/> Concave. Class III

Nostrils codification (with forced breathing)

						
<input type="checkbox"/> Level 0 Dilate	<input type="checkbox"/> Level 1 Doesn't collapse nor dilate	<input type="checkbox"/> Level 2 Unilateral partial closure	<input type="checkbox"/> Level 3A Bilateral partial closure	<input type="checkbox"/> Level 3B Unilateral total closure	<input type="checkbox"/> Level 4 Total closure and partial closure	<input type="checkbox"/> Level 5 Bilateral total closure


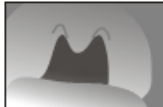




Inferior lingual frenum (Ask patient to lift his/her tongue with the completely open mouth, and to try to touch his/her palate)

5

					
<input type="checkbox"/> Level 0 Frenectomy	<input type="checkbox"/> Level 1 Tongue tip touches the palate	<input type="checkbox"/> Level 2 Almost touches the palate	<input type="checkbox"/> Level 3 The distance between the upper and lower incisors is the same	<input type="checkbox"/> Level 4 Reaches lower incisors	<input type="checkbox"/> Level 5 Doesn't reach lower incisors



Tonsils

6

					
<input type="checkbox"/> Level 0 Previous tonsillectomy	<input type="checkbox"/> Level 1 No visible tonsils	<input type="checkbox"/> Level 2 Very small tonsils (< 25%)	<input type="checkbox"/> Level 3 Tonsils occupy 1/3 of pharyngeal space (25% - 50%)	<input type="checkbox"/> Level 4 Tonsils occupy 2/3 of pharyngeal space (50% - 75%)	<input type="checkbox"/> Level 5 Tonsils occupy 3/3 of pharyngeal space (>75%)


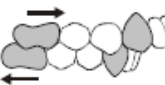


Lips

7

	<input type="checkbox"/> Lip contact in rest		<input type="checkbox"/> No lip contact in rest	<input type="checkbox"/> Dry or chapped lips
---	--	---	---	--

Malocclusion (Angle)

8

			
<input type="checkbox"/> Class I (Normal)	<input type="checkbox"/> Class II/1	<input type="checkbox"/> Class II/2	<input type="checkbox"/> Class III




Bite Occlusion

9

			
<input type="checkbox"/> Normal bite	<input type="checkbox"/> Anterior deep bite	<input type="checkbox"/> Open bite	<input type="checkbox"/> Crossbite (uni./bilat.)

Alignment

10

	<input type="checkbox"/> Normal		<input type="checkbox"/> Spacing		<input type="checkbox"/> Crowding
---	---------------------------------	---	----------------------------------	---	-----------------------------------




Swallowing

11

<input type="checkbox"/> Normal	<input type="checkbox"/> Makes faces while swallowing	<input type="checkbox"/> Tongue thrust or lip thrust while swallowing
---------------------------------	---	---

Posture alterations

12

	<input type="checkbox"/> Normal position		<input type="checkbox"/> Lordosis Lumbar curvature increased		<input type="checkbox"/> Cyphosis Curved back, reduced lumbar curvature, shoulders dropped, flat thorax and prominent abdomen
---	--	---	---	---	--

Adenoids:

13

Phonetical test (morning)	<input type="checkbox"/> Positive (different)	<input type="checkbox"/> Endoscopy (only ENT)	<input type="checkbox"/> No obstruction
	<input type="checkbox"/> Negative (same)	<input type="checkbox"/> Profile X-ray (only orthodontists)	<input type="checkbox"/> Partial obstruction
			<input type="checkbox"/> Severe obstruction

Recommended assessment by:

14

<input type="checkbox"/> ENT	<input type="checkbox"/> Orthodontist	<input type="checkbox"/> Speech therapist	<input type="checkbox"/> General practitioner
------------------------------	---------------------------------------	---	---