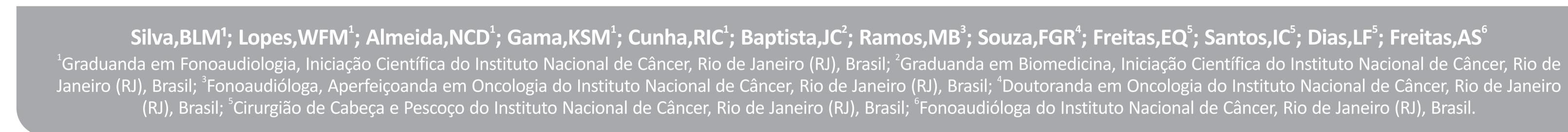


# SYNOVIAL SARCOMA OF THE LARYNX: REPORT FROM A FUNCTIONAL PERSPECTIVE



Key words: Sarcoma, Synovial; Synovioma of larynx; Head and Neck Cancer; Growth & Development

## INTRODUCTION



Less than 5% of soft tissue sarcomas occur in the head and neck. Less than 3% of them are synovial sarcomas. From our review of the literature, we have found only four cases described in children. As an aggressive tumor, the functional consequences can be outstanding and the quality of life, impaired. Despite this, in our review, no studies were found that deal with functional aspects after treatment

# **CASE REPORT**

It is a case report focusing on the functional aspects of a young man who developed monophasic synovial sarcoma of the larynx at 11 years old, submitted to the right enlarged arytenoidectomy by laryngofissure, radiotherapy and chemotherapy. The patient, alive and without cancer for three years and 9 months, is a semi professional basketball player. He has a child larynx with large epiglottis and arytenoid with thick and short vocal folds. Concerning to the vocal aspects, based on the perceptual-auditory evaluation, we detect roughness and strain with high pitch, which is confirmed in the acoustic analysis with a emission of the sustained /é/, which shows the Fo corresponding to 244,57Hz. Despite the awareness of his dysphonia, it does not impact his emotional and functional state.

As for the swallowing, based on the Video Fluoroscopic Swallowing Exam (VFSE) and the Fiberoptic Endoscopic Evaluation of Swallowing (FEES) exams, there is stasis in all consistencies. As for the Functional Oral Intake Scale (FOIS) he is on the level 6. However in analysis of his quality of life, he showed no limitation for swallowing.



Fig.5 VFSE: Moment of greater elevation and anteriorization of the hyoid bone with thin in (A), with nectar in (B) and honey in (C). In all consistencies it's possible to observer a great soft palate elevation and the good posteriorization of the tongue are noted. It should be noted that these swallows correspond to the same ones shown in Fig.7.

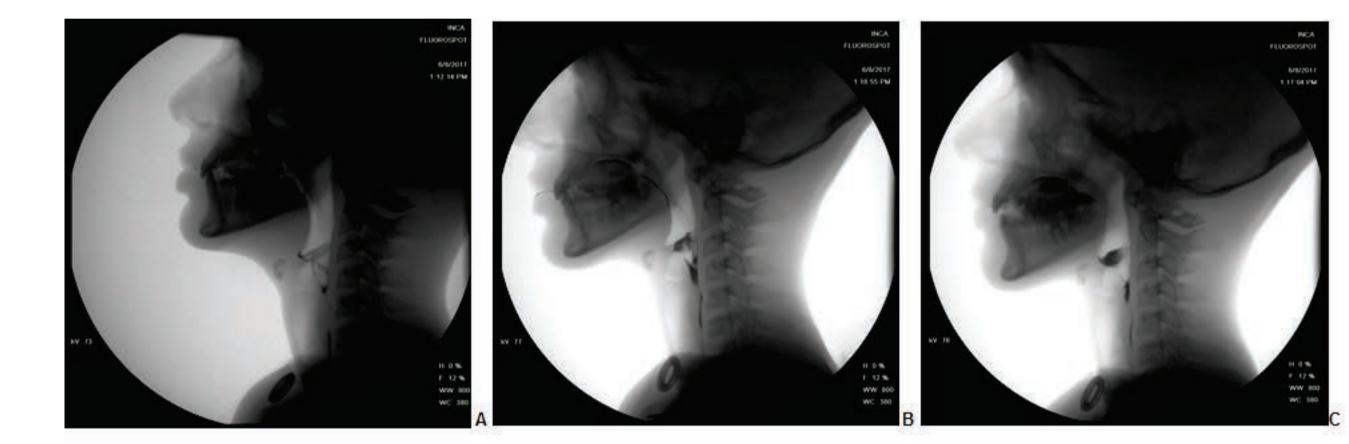


Fig.6 VFSE: After the pharyngeal phase, (A) after swallowing with thin, shows the contour of the left aryepiglottic fold and in the right bean came from the surgical procedure. With a small stasis in left piriform recess. (B) Swallowing with nectar is noted stasis in vallecula and piriform recess, with accumulation in the surgical beam. (C) Swallowing with honey, it is still observed the presence of stasis in vallecula and recess.



TABLE1-Protocols of Swallowing

Fig. 1. FACE: (A) lips parted. (B) With lip seal. (C) Approximation of the lip seal.

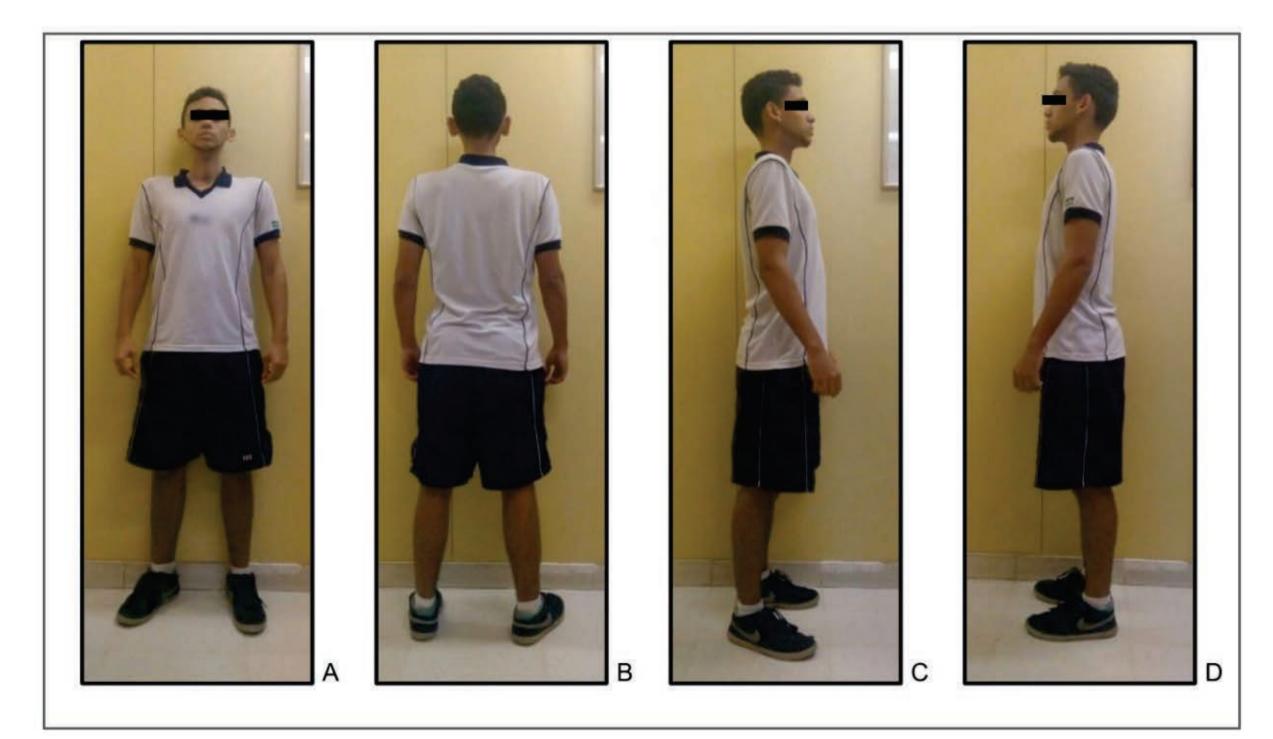


Fig.2 BODY: (A) Anterior view. (B) Rear view. (C) Right lateral view. (D) Left side view.

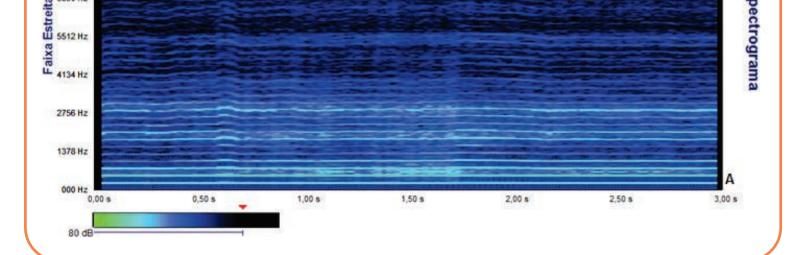


Fig.7 VOXMETRIA: It is observed a strain in source by the tone of Fo. There is harmonics, although they are thin and few. And among these we see a presence of noise.

#### TABLE3 - Protocol of the Voice Handicap Index (VHI)

DOMAINS	DYSPHONIC STANDARD	RESULTS
Functional Aspect	12,0	7
Organic Aspect	22,2	22
Emotional Aspect	13,9	2
TOTAL	48,1	30

# DISCUSSION

As a pathology that threatens life, and that therefore requires multimodal intervention, it is difficult to predict the functional consequences for the patient receiving this type of cancer treatment. Nevertheless, these are of great importance, especially when it comes to children. Still, it is not known to us, other studies that deal with this object.

### CONCLUSION

PROTOCOLS	STANDART	RESULT
SWAL QOL <sup>1</sup>	101	182
FOIS <sup>2</sup>	Level 7	Level 6

Swallowing Quality of Life Questionnaire<sup>1</sup> Functional Oral Intake Scale<sup>2</sup>

> TABELA2 - Protocolo: Consensus Auditory-Perceptual Evaluation of Voice (CAPE-V)

ATTRIBUTES	%	CONSTANCY
Overall Severity	14	Constant
Roughness	52	Constant
Breathiness	2	Constant
Strain	44	Constant
Pitch	44	Constant
Loudness	3	Constant
WET	13	Intermittent

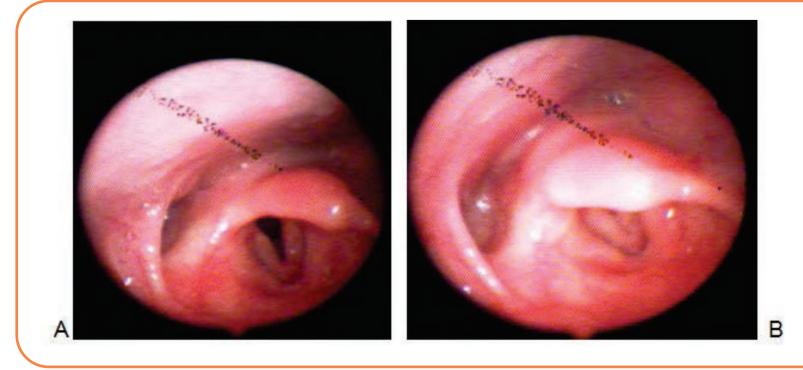


Fig.3 FEES: visualization of pharyngo-laryngeal structures. Note the absence of the right aryepiglottic fold, as well the arytenoid on the same side. (A) vocal cord in abduction and fig (B) vocal cord in adduction. In the present case, despite dysphonia and mild dysphagia, it was possible to preserve stomatognathic functions and to guarantee quality of life.

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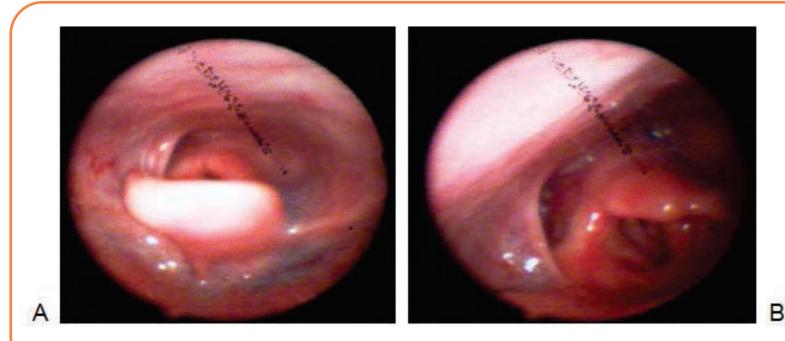


Fig.4 FEES: stasis in piriform recess and left vallecula for nectar. (A) Focusing on vallecula and (B) on piriform recess.

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MINISTÉRIO DA



