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Is the NBI diagnostic aid the same in all laryngeal injuries?

Alejandra Arellano Bárcenas
Department of Otorhinolaryngology and Head and Neck Surgery, Spain.
***Corresponding Author:** Alejandra Arellano Bárcenas, Department of Otorhinolaryngology and Head and Neck Surgery, Spain.

Abstract
Narrow band imaging (NARROW BAND IMAGING or NBI) was developed in Japan in 2001 and is an endoscopic vision technique that uses two lights with different wavelengths (415 and 540 nm) found in the blue light spectrum and green, which are absorbed by hemoglobin, generating spaces in the image, where it is not present.

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Introduction
Narrow band imaging (NARROW BAND IMAGING or NBI) was developed in Japan in 2001 and is an endoscopic vision technique that uses two lights with different wavelengths (415 and 540 nm) found in the blue light spectrum and green, which are absorbed by hemoglobin, generating spaces in the image, where it is not present. Thus, the blue light, with less energy, penetrates less into the tissue and shows the vascular structure of the mucosa, and on the other hand, the green light, with higher energy, penetrates deeper and shows the vascular pattern of the submucosa, this allows us to study the different patterns of neoangiogenesis in laryngeal lesions to distinguish between benign and malignant.

For almost two decades, it has been used in the diagnosis of upper aerodigestive tract lesions, which present non-keratinized epithelium, leaving doubts about its usefulness to improve diagnosis in areas covered with keratinized epithelium such as the glottis [1]. Ni et al. clarified this dilemma by publishing a study on the concordance between the patterns of neoangiogenesis and carcinoma [2].

With this technique, low- and high-grade dysplasias can be distinguished, with a sensitivity between 89-92%, even after cycles of radiotherapy and chemotherapy [3].

But it is important and we must take into account the following: that the presence of leukoplakia hides the capillaries of the mucosa (umbrella effect), so it is necessary to look for alterations in the limits of the lesion with the transition to normal epithelium, the same thing happens with the presence of necrotic tissue. Traumatic explorations and manipulations with aspirators and tweezers bring with them erosions and bleeding of the mucous membranes and alter vascular patterns, limiting the usefulness of NBI.

We must also remember that the adequate approach of the endoscope to the lesions is important for a correct identification of the vasculature, so the application of local anesthesia prior to the exploration is very important [4].

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