



ORIGINAL ARTICLE

# Application of Flexible Endoscopy-Based Biopsy in the Diagnosis of Tumour Pathologies in Otorhinolaryngology<sup>☆</sup>



Carlos Saga,<sup>a,\*</sup> Manuel Olalde,<sup>a</sup> Ekhiñe Larruskain,<sup>b</sup> Leire Álvarez,<sup>b</sup> Xabier Altuna<sup>b</sup>

<sup>a</sup> Servicio de Otorrinolaringología, Hospital Comarcal de Mendaro, Organización Sanitaria Integrada Bajo Deba, Mendaro, Gipuzkoa, Spain

<sup>b</sup> Servicio de Otorrinolaringología, Hospital Universitario Donostia, San Sebastián, Spain

Received 13 October 2016; accepted 2 April 2017

## KEYWORDS

Cost–benefit analysis;  
In-office procedure;  
Flexible biopsy;  
Flexible laryngoscope;  
Pharyngeal cancer;  
Laryngeal cancer;  
Outpatient surgical procedures;  
Laryngeal mass;  
Dysphagia;  
Dysphonia

## Abstract

**Introduction and objectives:** Interventional endoscopy allows us to act on the pathology of the patient with minimal discomfort, low costs and high efficiency. We assessed the validity of flexible endoscopic biopsies in our hospital, in lesions suspected of malignancy in the rhinopharyngo-laryngeal space.

**Subjects and methods:** Retrospective study of patients with a pathology suspected of malignancy assessed between 2006 and 2016 in our centre. We evaluated the effectiveness, the tolerance and the number of complications. We calculated the cost reduction in comparison with direct laryngoscopy in the operating room. We compared our sample with others of similar characteristics described in the literature.

**Results:** Thirty patients were studied with a flexible endoscopic biopsy during that period. Nineteen patients obtained positive results which allowed them to start treatment for their pathology. Seven cases had no evidence of malignancy and required another biopsy under general anaesthesia, which confirmed the carcinoma diagnosis. Two samples ruled out malignancy which was confirmed by laryngeal microsurgery. One case showed inflammation and the lesion was cured after antibiotherapy. It was impossible to collect the sample in one case. Thus, we obtained sensitivity levels of 73% with a specificity of 100%. There were no complications. The cost reduction in our sample was above 80%.

**Conclusions:** Flexible endoscopic biopsy has advantages over direct laryngoscopy that are relevant in the diagnosis of oncological pathology in otorhinolaryngology.

© 2017 Elsevier España, S.L.U. and Sociedad Española de Otorrinolaringología y Cirugía de Cabeza y Cuello. All rights reserved.

<sup>☆</sup> Please cite this article as: Saga C, Olalde M, Larruskain E, Álvarez L, Altuna X. Aplicación de la biopsia por endoscopia flexible en el diagnóstico de la patología tumoral en otorrinolaringología. Acta Otorrinolaringol Esp. 2018;69:18–24.

\* Corresponding author.

E-mail address: [saga@altunasaga.com](mailto:saga@altunasaga.com) (C. Saga).

**PALABRAS CLAVE**

Análisis coste beneficio;  
 Procedimiento en consulta;  
 Biopsia flexible;  
 Laringoscopia flexible;  
 Cáncer faríngeo;  
 Cáncer laríngeo;  
 Procedimientos quirúrgicos ambulatorios;  
 Masa laríngea;  
 Disfagia;  
 Disfonía

## Aplicación de la biopsia por endoscopia flexible en el diagnóstico de la patología tumoral en otorrinolaringología

**Resumen**

**Introducción y objetivos:** La endoscopia intervencionista nos permite actuar sobre la patología del paciente con mínimas molestias, bajos costes y alta eficiencia. Evaluamos la validez de la biopsia por endoscopia flexible en nuestro hospital, en las lesiones sospechosas de malignidad en el espacio rinofaringolaríngeo.

**Material y método:** Estudio retrospectivo de los pacientes con patología sospechosa de malignidad valorados en el periodo 2006-2016 en nuestro centro. Valoramos la eficacia, la tolerancia y número de complicaciones. Calculamos la reducción de costes frente a la laringoscopia directa en quirófano. Comparamos nuestra muestra con otras de características similares descritas en la bibliografía.

**Resultados:** Treinta pacientes fueron estudiados mediante biopsia por endoscopia flexible en ese periodo. Diecinueve pacientes obtuvieron resultados positivos que permitieron iniciar el tratamiento de su patología. Siete casos, sin evidencia de malignidad, requirieron nueva biopsia bajo anestesia general que confirmó el diagnóstico de carcinoma. Dos muestras descartaron malignidad, dato que se confirmó tras microcirugía de laringe. Un caso mostró inflamación y la lesión se resolvió tras antibioterapia. En un caso la toma de muestra resultó imposible. Obtenemos de esta forma niveles de sensibilidad del 73% con una especificidad del 100%. No se produjeron complicaciones. La reducción de costes en nuestra muestra fue superior al 80%.

**Conclusiones:** La biopsia por endoscopia flexible aporta ventajas sobre la laringoscopia directa que resultan de interés en el diagnóstico de patología oncológica en otorrinolaringología.

© 2017 Elsevier España, S.L.U. y Sociedad Española de Otorrinolaringología y Cirugía de Cabeza y Cuello. Todos los derechos reservados.

**Introduction**

In our speciality it is vitally important to detect neoplasms in the pharyngolaryngeal area. Cancer of the pharynx and larynx were detected in 5062 new patients during 2012 in Spain, and 2273 patients died due to neoplasms in this area.<sup>1</sup>

As with all oncological diseases, early diagnosis is vitally important to enable us to plan and provide appropriate treatment fast, and improve the likelihood of a cure.

The introduction of fibroscopy<sup>2</sup> in the 70s was a major advance in our diagnostic capacity, and is currently performed over indirect examination of the upper airway.

The more recent emergence of video fibroscopy systems and the incorporation of endoscopes with a working channel have enabled us in addition to act on the structures that we are exploring for diagnostic and therapeutic purposes. There are many studies that have demonstrated the safety, ease of execution and efficiency of interventional endoscopy techniques.<sup>3-5</sup> Therefore, nowadays, the inclusion of video fibroscopy equipment with a working channel in ENT departments saves on costs and improves the efficacy of our work in certain conditions:

- Botulinum toxin application.
- Augmentation of vocal folds.
- Laser treatments for dysplasia and papillomatosis.
- Resection of benign lesions.
- Biopsies.
- Removal of foreign bodies.

Since 2006, we have been using flexible endoscopic biopsy (FEB) in lesions suspected to be malignant in order to accelerate the diagnostic and therapeutic process.

Up until that date, we routinely used the classical protocol in which, after detecting the lesion, we took the tissue sample for anatomopathological study by exploration under a general anaesthetic. The aim of this study was to assess the tolerance, efficiency and yield of FEB and the improvements of this protocol compared to exploration and biopsy under general anaesthesia, the gold standard in diagnosing rhinopharyngolaryngeal neoplasias in our speciality.

**Material and Method**

This technique was reviewed in a regional hospital with a health care area covering 80 000 people. Lesions suspected of malignancy were found in 30 patients between January 2006 and February 2016, and they were offered the possibility of confirming their diagnosis by flexible endoscopy and biopsy. After the procedure was explained to the patients and they had given their informed consent, the operation was performed as detailed in the section below. The characteristics of the sample are described in [Table 1](#).

Of a total 30 biopsies, we assessed the volume of the sample obtained, the limitations of the technique and the return on investment in this type of equipment compared to routine direct exploration under general anaesthetic.

We looked at FEB as further information to confirm the clinician's impression of a lesion's malignancy during

Download English Version:

<https://daneshyari.com/en/article/8804967>

Download Persian Version:

<https://daneshyari.com/article/8804967>

[Daneshyari.com](https://daneshyari.com)