



ORIGINAL ARTICLE

A Review of Our Experience in Phonosurgery in Children[☆]



CrossMark

Mikel Landa,* Idoia Palicio, Leire Álvarez, Zuriñe Martínez

Servicio de Otorrinolaringología, Hospital Universitario Donostia, San Sebastián, Guipúzcoa, Spain

Received 27 January 2016; accepted 23 November 2016

KEYWORDS

Dysphonia;
Surgery;
Voice disorders;
Child

Abstract

Introduction and objectives: Dysphonia is a common problem in children, especially those of school age. Exploration of vocal folds is often difficult and less accurate in children. The most frequent lesions found in children with chronic dysphonia are vocal nodules, followed by epidermoid cysts and other congenital lesions, such as sulci and mucosal bridges. The treatment is multidisciplinary and it is fundamentally based on vocal rehabilitation. We indicate surgical treatment in children older than 9 years of age for whom the problem persists after rehabilitation, especially if we suspect a congenital lesion of the vocal fold.

Methods: We present a retrospective study of paediatric phonosurgery performed by the Vocal Pathology Unit of our Hospital over a period of 9 years (2005–2013). Fifty-one children were included, ranging in age from 9 to 16 years old. We analysed the distribution of the different lesions, both congenital and acquired. We evaluated the results by subjective evaluation by the children's relatives.

Results: We obtained a distribution of 76% (n=39) of congenital lesions and 24% (n=12) of acquired lesions. After surgery, there was a global percentage of improvement of 90%, with better results in cases of vocal nodules, without statistical significance.

Conclusions: The evaluation of the results of this surgery is controversial and in this study is done with a single question survey administered to relatives. We found an overall result of improvement in 90% of operated cases, without any complications. We obtained better results in vocal nodules, although not reaching statistical significance.

© 2016 Elsevier España, S.L.U. and Sociedad Española de Otorrinolaringología y Cirugía de Cabeza y Cuello. All rights reserved.

[☆] Please cite this article as: Landa M, Palicio I, Álvarez L, Martínez Z. Revisión de nuestra experiencia en fonocirugía infantil. Acta Otorrinolaringol Esp. 2017;68:269–273

* Corresponding author.

E-mail address: mamiklan@hotmail.com (M. Landa).

PALABRAS CLAVE

Disfonía;
Cirugía;
Alteraciones de la
voz;
Niño

Revisión de nuestra experiencia en fonocirugía infantil

Resumen

Introducción y objetivos: La disfonía es un problema frecuente en los niños, especialmente en edad escolar. La exploración de las cuerdas vocales suele ser más difícil y menos precisa que en los adultos. La lesión que más a menudo encontramos en niños con disfonía crónica son los nódulos vocales, seguido de los quistes epidermoides y de las demás lesiones congénitas, como sulcus y puente mucoso. El tratamiento es multidisciplinar y se basa fundamentalmente en rehabilitación vocal. Indicamos tratamiento quirúrgico en niños mayores de 9 años en los que persiste el problema tras la rehabilitación, sobre todo si sospechamos una lesión congénita de la cuerda vocal.

Métodos: Presentamos un estudio retrospectivo de la fonocirugía infantil realizada en nuestro hospital durante 9 años (2005-2013). Se incluye a 51 niños, con edades comprendidas entre los 9 y los 16 años. Analizamos la distribución de las diferentes lesiones, tanto congénitas como adquiridas. Evaluamos los resultados mediante la valoración subjetiva de los familiares de los niños intervenidos.

Resultados: Obtuvimos una distribución del 76% ($n = 39$) de lesiones congénitas y un 24% ($n = 12$) de lesiones adquiridas. Encontramos un porcentaje global de mejoría tras la cirugía del 90%, con mejores resultados en los nódulos vocales, aunque sin alcanzar significación estadística.

Conclusiones: La valoración de los resultados de esta cirugía es controvertida y en este estudio se hace con una única pregunta a los familiares. Encontramos un resultado global de mejoría en el 90% de los casos intervenidos, sin ninguna complicación. Tenemos mejores resultados con los nódulos vocales, aunque no alcanzan significación estadística.

© 2016 Elsevier España, S.L.U. y Sociedad Española de Otorrinolaringología y Cirugía de Cabeza y Cuello. Todos los derechos reservados.

Introduction

Dysphonia is common in children, with an incidence of between 6% and 9%, according to the majority of studies,^{1,2} although several authors state that it exists in up to 40% of school age children.³ The majority of patients we care for are of school age and usually present with dysphonia from some time ago, with the organic lesion being more common in adults.³ Dysphonia in pre-school age children presents with a differentiated aetiology and both diagnosis and treatment are different.

A child's larynx presents with anatomical differences compared with that of the adult. In the newborn the membranous and cartilaginous parts of the vocal cord are similar in size. Later, the membranous part increases in size compared to the cartilaginous part, up to puberty, when a huge increase in size occurs in very limited time, especially in males.⁴ The internal structure of the vocal cord is also greatly transformed during the first years of life and it appears that up until 10 years of age there is no clear differentiation between the superficial and deep layers of the vocal folds.⁵

Examination of the glottis is more complex in children than in adults, especially in those of a young age. Video stroboscopy is the examination method of choice, although if this is not possible fibroscopy would be used instead.

The most common glottic lesion in this pathology are the vocal cord nodules (from 50% to 70%)¹⁻³ from chronic vocal abuse. Following this, epidermoid cyst is the most common

lesion, followed by other congenital disorders (sulcus and mucosal bridge).

Treatment of this pathology is multi-disciplinary. Referral for surgery is more conservative than in the adult. We recommend it for patients when vocal rehabilitation has failed and especially if there is suspicion of a congenital lesion.

Material and Methods

We present a retrospective study of children who underwent phonosurgery between years 2005 and 2013 in the vocal pathology unit of the otorhinolaryngology unit in our hospital.

Our sample was of 51 patients, of whom 30 were males and 21 females, aged between 9 and 16 years, with a mean age of 12. Out of the 51 patients, 12 presented with vocal cord nodules. The remaining 39 presented with congenital lesions (epidermoid cyst, sulcus and mucosal bridge).

Out of the 39 patients with congenital lesions, 17 presented with epidermoid cysts, 14 with sulcus (8 of them bilateral) and one presented with a bilateral mucosal bridge. Furthermore, 5 cases presented with an epidermoid cyst with sulcus and 2 with epidermoid cysts with mucosal bridges.

Surgical treatment at paediatric age is governed by the same principles as that of adults. Complete excision was therefore made in cases of vocal cord nodules. Cordotomy was used for congenital lesions, with total removal of the capsule in the epidermoid cysts and

Download English Version:

<https://daneshyari.com/en/article/8805002>

Download Persian Version:

<https://daneshyari.com/article/8805002>

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