



IMAGES IN OTORHINOLARYNGOLOGY

Calcification of the epiglottis

Calcificación de la epiglotis

Ana Fernández-Rodríguez,^{a,*} José Ignacio Benito-Orejas,^a
Adriana Elena Jiménez-Pérez,^b and Darío Morais-Pérez^a

^aServicio de Otorrinolaringología, Hospital Clínico Universitario, Valladolid, Spain

^bServicio de Radiología, Hospital Clínico Universitario, Valladolid, Spain

Received September 12, 2008; accepted September 26, 2008

The study of the ossification patterns of the laryngeal cartilage has been the object of histological and radiological investigation for more than one hundred years. It is a process that affects the hyaline cartilage (thyroid, cricoid, and arytenoid), possibly reflecting the increase of apoptosis

in relation to age as a key factor in cartilage degeneration and calcification.

Classic texts state that the epiglottic cartilage is the only one which, due to its elastic properties, does not suffer this osteal transformation. Although there are some



Figure 1 Lateral cervical radiograph.



Figure 2 Computerized sagittal tomography.



Figure 3 Computerized axial tomography.

*Corresponding author.

E-mail address: afrodri@yahoo.es (A. Fernández-Rodríguez).

cases described, their extreme rarity has prompted us to publish the images we present here. They belong to a man of 70 years of age, with no history of interest, who was admitted to our department of otolaryngology for a suspected parapharyngeal phlegmon. In the radiographic study requested, a linear calcification of the epiglottis was found by chance which, with interruptions, extended from the base to the free portion. The route of the calcification can be observed in the lateral cervical radiograph (Figure 1) and the sagittal image of the computerized tomography

(CT) (Figure 2); as shown in the axial section of the CT (Figure 3), it is located at the centre of the cartilage.

During swallowing, the epiglottis acts as a lid protecting the entrance of the airway, covering the laryngeal curb. Calcification may alter its mechanical properties and favour aspiration and the life-threatening risk of pneumonia in the elderly.

Conflict of interests

The authors have indicated there is no conflict of interest.