

Oral Presentation:

Highspeed films for evaluation of reflux to help rock popular singers

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Objective:

The objective of the study was to evaluate the use of highspeed films to quantify swelling in the larynx due to reflux in order to help singers.

Material and methods:

It is known that mucus can be regurgitated to the larynx due to reflux. Highspeed films from Wolf Ltd. have 8000 pictures during a period of two seconds. On highspeed films the mucus was discovered in the larynx during a period of 0,2 seconds, after which there only was a slight oedema on the arytenoids region. Especially rock singers tend to have problems with reflux in their career. Two films are shown of rock singers with reflux.

We have tried to make video scores of the abnormality of the arytenoids region in highspeed films. In an earlier study, it was shown that acoustical measures were different when scores were abnormal. In this study we compared visual scores on high speed films a group of patients before and after treatment for laryngeal reflux with one of three groups receiving either: lifestyle guidance and no other related medication, lifestyle guidance and 40mg esomeprazole, or lifestyle guidance combined with 40mg esomeprazole and alginate.

Results and conclusion:

Statistically the arytenoids oedema was reduced on highspeed films in all patients. Due to the fact that online evaluation of the larynx on highspeed films is the correct visual picture, it is our experience that highspeed films are superior to video stroboscopy for evaluating reflux in singers. On high speed films, inter-arytenoids oedema was found to be the basic objective finding in patients with reflux to the larynx. If the reflux is discovered early and lifestyle changed, the influence on a singing career is probably minimal.

Reference: (1) Pedersen M, Munck K (2007). A prospective case-control study of jitter%, shimmer% and Qx%, glottis closure cohesion factor (Spead by Laryngograph Ltd.) and Long Time Average Spectra. *Congress report Models and analysis of vocal emissions for biomedical applications (MAVEBA); pages 60-4.*