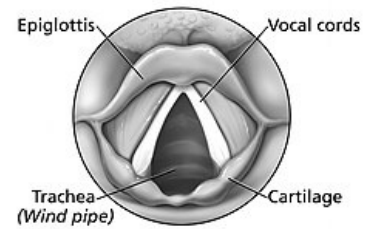


Vocal cords

The **vocal cords** are the basic organ of the vocal (phonation) system.

Anatomy

The *glottis* is a sagittally oriented slit creating the voice in the middle of the larynx, between the *plicae vocales*, the basis of which is the *lig. vocale* and *m. thyroarytaenoideus* - to *lig. vocale* attached from the outside. This is where the narrowest part of the airways, the **rima glottidis** (glottic slit), is located. On the glottis we distinguish two parts: **pars intermembranacea** - the ventral and larger part between the proper vocal ligaments, and **pars intercartilaginea** - the dorsal short section between the *cartilagine arytaenoideae*.

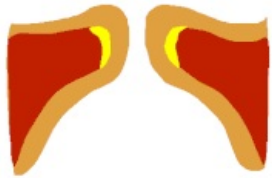


National Cancer Institute

Laryngoscopic image

Just above the glottis, between the level of the *plicae vocales* and the *plicae vestibulares*, the expansion of the center of the larynx to both sides creates the *ventriculus laryngis* - a laterally arched protrusion. The *ventriculus* can be connected laterally on both sides by a small protrusion - the *sacculus laryngis*. It is well developed in a newborn, only indicated in an adult, but sometimes there may be more.

Voice Creation



Movement of the vocal cords

The *rima glottidis* changes its width and the tension of its edges under the influence of the laryngeal muscles, which control the movements of the laryngeal cartilages. By vibrating the *plicae vocales* with the flow of air during exhalation **is produced in the slit sound**, which then resonates in the cavities located above (larynx, pharynx, oral cavity, nasal cavity, paranasal sinuses) acquires the color of the human voice. Differences in the structure of the larynx of men and women cause differences in the pitch of the voice. A man's vocal cords are 24-25 mm, the larynx is generally more spacious. Therefore, men have a voice approximately an octave lower than women. The length of female vocal cords is around 20 mm.



Photo of rima glottidis

Links

Related Articles

- Muscles of the larynx
- Larynx

External links

- Article on phonetics (<https://is.muni.cz/elportal/estud/ff/js08/fonetika/ucebnice/ch05s02s02.html>) on the website of the Faculty of Philosophy of Masaryk University
- Making sound with the vocal cords - Youtube (<https://www.youtube.com/watch?v=b89RSYCaUBo>)

References

- CIHÁK, Radomír and Miloš GRIM. *Anatomy*. 2nd 3rd edition. Prague: Grada, 2013. ISBN 978-80-247-4788-0 .