cancer.org | 1.800.227.2345

What Are Laryngeal and Hypopharyngeal Cancers?

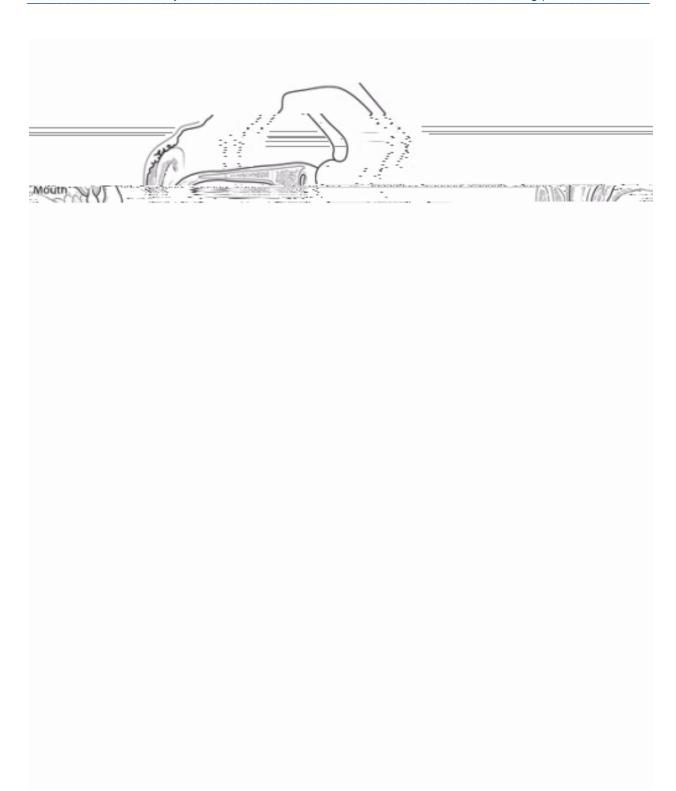
close tightly when you swallow to keep food and fluids from entering your lungs.

• The vocal cords open naturally when you breathe so that air can get in and out of your lungs.

The hypopharynx

The hypopharynx is the lower part of the throat (pharynx) that lies right behind your larynx. The hypopharynx is the entrance into the esophagus (the tube that connects your throat to your stomach). When you swallow foods and liquids, they pass through your throat to your stomach. The hypopharynx helps make sure that food goes around the larynx and into the esophagus and not into the larynx.

Ask your doctor to explain to you where your cancer is located. Use the 3D interactive model to see more.



Types of larynx and hypopharynx cancers

Squamous cell carcinomas

Almost all cancers in the larynx or hypopharynx develop from thin, flat cells called squamous cells, which make up the inner lining of these 2 structures. Cancer that starts from squamous cells is called squamous cell carcinoma or squamous cell cancer.

Carcinoma in situ (CIS) is the earliest form of cancer. In CIS, the cancer cells are only seen in the cells lining the larynx or hypopharynx. They haven't grown into deeper layers or spread to other parts of the body. Most of these early cancers can be cured, but if CIS isn't treated, it can develop into an invasive squamous cell cancer that can destroy nearby tissues and spread to other parts of the body.

Other cancers

Other rare types of cancer can also start in the larynx or hypopharynx.

Minor <u>salivary gland cancers</u>²: Some parts of the larynx and hypopharynx have tiny glands called minor salivary glands under their lining. These glands make mucus and saliva to lubricate and moisten the area. Cancer rarely develops from the cells of these glands.

<u>Sarcomas</u>³: The shape of the larynx and hypopharynx depends on a framework of connective tissues and cartilage. Cancers like chondrosarcomas or synovial sarcomas can develop from connective tissues of the larynx or hypopharynx, but this is extremely rare.

Other rare types of laryngeal cancer include lymphomas, neuroendocrine tumors, and plasmacytomas.

This information focuses on squamous cell cancer of the larynx and hypopharynx.

To learn more about how cancer starts and spreads, see What Is Cancer?4

Hyperlinks

1. www.cancer.org/cancer/types/head-neck-cancer.html

- 2. www.cancer.org/cancer/types/salivary-gland-cancer.html
- 3. www.cancer.org/cancer/types/soft-tissue-sarcoma.html
- 4. www.cancer.org/cancer/understanding-cancer/what-is-cancer.html

References

Leeman JE, Katabi N, Wong, RJ, Lee NY, and Romesser PB. Chapter 65 - Cancer of the Head and Neck. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 6th ed. Philadelphia, Pa: Elsevier; 2020.

Mendenhall WM, Dziegielewski PT, and Pfister DG. Chapter 45- Cancer of the Head and Neck. In: DeVita VT, Lawrence TS, Rosenberg SA, eds. *DeVita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology.* 11th ed. Philadelphia, Pa:

Key Statistics for Laryngeal and Hypopharyngeal Cancers

How common is laryngeal cancer?
How common is hypopharyngeal cancer?

Visit the <u>American Cancer Society's Cancer Statistics Center</u>³ for more key statistics.

Hyperlinks

What's New in Laryngeal and Hypopharyngeal Cancer Research and Treatment?

- Gene changes in laryngeal and hypopharyngeal cancers
- Treatment

Research into the <u>causes</u>¹, <u>prevention</u>², and <u>treatment</u>³ of laryngeal and hypopharyngeal cancers is now being done at many medical centers, university hospitals, and other institutions around the world.

Gene changes in laryngeal and hypopharyngeal cancers

A lot of research is being done to learn how changes in certain <u>genes</u>⁴ cause cells in the larynx or hypopharynx to become cancer. As doctors learn more about these gene changes, it could help them better identify which cancers are going to be harder to treat or are more likely to come back after treatment.

Researchers hope this information might also lead to better tests for early detection and to new treatments.

Treatment

In the coming years, promising new forms of treatment may work better and cause fewer long-term treatment-related changes in how a person eats and speaks.

Surgery

Doctors continue to improve surgery techniques to limit the amount of normal tissue that's removed along with the tumor. This might help lessen <u>side effects</u>⁵ after treatment.

One surgery technique now being studied is **transoral robotic surgery (TORS)**. In this approach, the surgeon operates by precisely moving robotic arms holding long surgical tools that are passed down the throat. TORS uses smaller incisions (cuts), so it might lessen the side effects and long-term changes from surgery. Doctors are looking at using TORS instead of more extensive open surgery for early-stage tumors.

Hyperlinks

- 1. <u>www.cancer.org/cancer/types/laryngeal-and-hypopharyngeal-cancer/causes-risks-prevention/what-causes.html</u>
- 2. <u>www.cancer.org/cancer/types/laryngeal-and-hypopharyngeal-cancer/causes-risks-prevention/prevention.html</u>
- 3. www.cancer.org/cancer/types/laryngeal-and-hypopharyngeal-cancer/treating.html
- 4. www.cancer.org/cancer/understanding-cancer/genes-and-cancer.html
- 5. www.cancer.org/cancer/managing-cancer/side-effects.html
- 6. www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html
- 7. www.cancer.org/cancer/types/laryngeal-and-hypopharyngeal-cancer/treating/immunotherapy.html
- 8. www.cancer.org/cancer/managing-cancer/treatment-types/targeted-therapy.html

References

Coskun C, Verim A, Farooqi AA, et al. Are there possible associations between MnSOD and GPx1 gene variants for laryngeal cancer risk or disease progression? *Cell Mol Biol (Noisy-le-grand)*. 2016;62(5):25-30.

Dziegielewski PT, Kang SY, Ozer E. Transoral robotic surgery (TORS) for laryngeal and hypopharyngeal cancers. *J Surg Oncol.* 2015;112(7):702-706. doi:10.1002/jso.24002.

Hamilton D, Paleri V. Role of transoral robotic surgery in current head & neck practice. *Surgeon*. 2017;15(3):147-154.

Hanna J, Brauer PR, Morse E, Judson B, Mehra S. Is robotic surgery an option for early T-stage laryngeal cancer? Early nationwide results. *Laryngoscope*. 2020;130(5):1195-1201. doi:10.1002/lary.28144.

Imanishi Y, Ozawa H, Sakamoto K, et al. Clinical outcomes of transoral videolaryngoscopic surgery for hypopharyngeal and supraglottic cancer. *BMC Cancer*. 2017;17(1):445.

Steuer CE, El-Deiry M, Parks JR, Higgins KA, Saba NF. An update on larynx cancer. *CA Cancer J Clin*. 2017;67(1):31-50. doi:10.3322/caac.21386.

Tamaki A, Rocco JW, Ozer E. The future of robotic surgery in otolaryngology - head

and neck surgery. *Oral Oncol.* 2020;101:104510. doi:10.1016/j.oraloncology.2019.104510.

Tateya I, Shiotani A, Satou Y, et al. Transoral surgery for laryngo-pharyngeal cancer - The paradigm shift of the head and cancer treatment. *Auris Nasus Larynx*. 2016;43(1):21-32. doi:10.1016/j.anl.2015.06.013.

Zahoor T, Dawson R, Sen M, Makura Z. Transoral laser resection or radiotherapy? Patient choice in the treatment of early laryngeal cancer: a prospective observational cohort study. *J Laryngol Otol.* 2017;131(6):541-545.

Last Revised: January 19, 2021

Written by

The American Cancer Society medical and editorial content team https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as editors and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy (www.cancer.org/about-us/policies/content-usage.html).

cancer.org | 1.800.227.2345