

What is Pharynx Reconstruction?

The **pharynx** is the part of the throat that connects the mouth and nose to the food pipe (esophagus) and windpipe (trachea). It plays a vital role in **swallowing, speaking, and breathing**.

Sometimes, due to **cancer, trauma, or surgery**, parts of the pharynx may need to be removed. This can make it difficult or impossible to eat, speak, or breathe normally.

Pharynx reconstruction is a specialized surgery done by reconstructive surgeons to **rebuild the throat**, allowing patients to regain essential functions like swallowing and speech.

Why is Reconstruction Needed?

- To restore **swallowing ability**
- To help the patient **speak clearly**
- To create a **safe passage** for food and air
- To improve **quality of life** after cancer surgery

How is the Pharynx Reconstructed?

The type of reconstruction depends on the **extent of tissue removed**, the **location (upper, middle, or lower pharynx)**, and the **patient's overall health**. Surgeons choose from **regional flaps** or **free flaps** to restore the structure and function of the throat.

Jejunal Free Flap (Bowel Flap)

- **What it is:** A segment of the small intestine (jejunum) taken with its blood supply.
- **How it's used:** Transplanted into the neck and used to recreate the food passage.
- **Advantages:** Naturally tubular and moist, ideal for swallowing.
- **Limitations:** Requires abdominal surgery, longer recovery.

Best suited for **total circumferential defects** or when mucosal lining is essential.

Radial Forearm Free Flap (RFFF)

- **What it is:** Thin, flexible skin and tissue taken from the forearm.
- **How it's used:** Shaped into a **tube** to recreate the pharynx. Blood vessels are connected under a microscope.
- **Advantages:** Ideal for **narrow, long defects**, excellent healing, thin and pliable.
- **Limitations:** Requires microsurgery, a visible scar on the forearm.

Gold standard for circumferential (full-circle) pharyngeal defects.

Anterolateral Thigh Flap (ALT Flap)

- **What it is:** Tissue from the side of the thigh, with fat and skin.
- **How it's used:** Used either as a tube or a patch.
- **Advantages:** Can be tailored in thickness, low donor site problems.
- **Limitations:** Thicker than radial flap, may need thinning for smaller necks.

Useful in large or combined defects (pharynx + skin).

Pectoralis Major Myocutaneous Flap (PMMC)

- **What it is:** A muscle and skin flap taken from the chest (pectoralis major muscle).
- **How it's used:** Rotated upward to fill the throat defect.
- **Advantages:** Easy to harvest, no microsurgery needed.
- **Limitations:** Bulky, can lead to speech/swallowing difficulties in complex cases.

Common in patients who are not suitable for long, complex surgeries.

Choosing the Right Surgery

Reconstructive surgeons assess:

- Size and shape of the defect
- Involvement of esophagus or voice box
- General health and nutrition of the patient
- Previous radiation or surgeries

They select the technique that gives the best chance for **swallowing, speaking, and healing**.

"Pharynx reconstruction is a life-changing surgery that helps people **recover function and dignity** after cancer or trauma. With skilled surgical care and rehabilitation, patients can return to **a near-normal life**."