

## What is Lip Reconstruction?

Lip reconstruction is a **surgical procedure** to rebuild or repair the lips after they've been affected by:

- **Cancer surgery**
- **Injuries or trauma**
- **Infections or burns**

## Why is Lip Reconstruction Important?

The lips are crucial for:

- **Speech**
- **Eating & drinking**
- **Facial expression**
- **Aesthetic appearance**

When part of the lip is lost or damaged, it can affect both **function and confidence**. Reconstruction helps restore **normalcy and quality of life**.

## Surgical Options for Lip Reconstruction

The choice of surgery depends on the **size, location**, and **depth** of the defect, as well as whether it involves the **upper or lower lip**, one or both sides, and surrounding structures like the cheek or nose.

Let's break it down by **defect size and technique**:

### 1. Primary Closure (Simple Stitching)

- **Used for:** Small defects (usually <1/3 of the lip width)
- The remaining lip is gently stretched and stitched together
- Preserves function and shape well if the defect is small
- **No extra tissue is needed**

### 2. Local Flaps (Tissue Rearrangement Nearby)

- **Used for:** Medium-sized defects (up to 1/2 the lip)
- Tissue from areas **next to the lip** (cheek, chin) is rotated or moved to fill the gap

Common local flaps include:

### Abbe Flap (Cross-Lip Flap)

- Tissue is borrowed from the **opposite lip**
- Good for central lip defects
- A second surgery is done to separate the flap once healing begins

#### Estlander Flap

- Used for defects at the **corner of the mouth**
- Tissue from the other lip is rotated to restore shape and opening of the mouth

#### Karapandzic Flap

- A circular advancement of tissue that **preserves nerve and muscle function**
- Good for maintaining movement and sensation

### 3. Regional Flaps (Tissue from Nearby Face)

- Tissue is borrowed from **closer but not immediately adjacent areas** (like the cheek)
- Used when more tissue is needed to cover **large lip defects**
- Example: **Nasolabial flap** (tissue from the area beside the nose)

### 4. Free Flap Reconstruction (Microsurgery)

- **Used for:** Very large or complex defects
- Tissue is taken from a distant part of the body (like forearm, thigh, or tongue) and reconnected under a microscope
- Requires microsurgical skill to connect tiny **blood vessels and nerves**

Common free flaps:

- **Radial Forearm Free Flap (RAFF)**
- **Anterolateral Thigh (ALT) Flap**
- Sometimes combined with **bone or muscle** if needed

### 5. Composite Reconstruction (Multi-layer Repair)

- In some cases, reconstruction involves multiple layers:
  - **Mucosa** (inner lining)
  - **Muscle** (for movement)
  - **Skin** (outer layer)
- This often needs **combinations of flaps** or **staged procedures**