

Salvage Reconstruction of Intraoral Dehiscence following Free Fibular Flap with a Superficial Temporal Artery Islandized Flap (STAIF)

Authors : Allyne Topaz

Abstract : Intraoral dehiscence compromises free fibula flaps following mandibular reconstruction. Salivary contamination risks thrombosis of microvascular anastomosis and hardware infection. The superficial temporal artery islandized flap (STAIF) offers an efficient, non-microsurgical reconstructive option for regaining intraoral competency for a time sensitive complication. **Methods:** The STAIF flap is based on the superficial temporal artery coursing along the anterior hairline. The flap is mapped with assistance of the doppler probe. The width of the skin paddle is taken based on the ability to close the donor site. The flap is taken down to the level of the zygomatic arch and tunneled into the mouth. **Results:** We present a case of a patient who underwent mandibular reconstruction with a free fibula flap after a traumatic shotgun wound. The patient developed repeated intraoral dehiscence following failed local buccal and floor of mouth flaps leading to salivary contamination of the flap and hardware. The intraoral dehiscence was successfully salvaged on the third attempt with a STAIF flap. **Conclusions:** Intraoral dehiscence creates a complication requiring urgent attention to prevent loss of free fibula flap after mandibular reconstruction. The STAIF is a non-microsurgical option for restoring intraoral competency. This robust, axially vascularized skin paddle may be split for intra- and extra-oral coverage, as needed and can be an important tool in the reconstructive armamentarium.

Keywords : free fibula flap, intraoral dehiscence, mandibular reconstruction, superficial temporal artery islandized flap

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020