



**“EVALUATION OF SPEECH OUTCOME FOLLOWING RESECTION AND
RECONSTRUCTION OF THE TONGUE AND FLOOR OF THE MOUTH
CANCER” -A PROSPECTIVE STUDY**

By

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ABSTRACT

AIMS:

To evaluate speech outcome of patients who will be undergoing resection & reconstruction of carcinoma of tongue and floor of the mouth on the basis of reconstruction flap used.

MATERIALS AND METHODS:

The proposed study is a prospective study will be conducted on patients with tongue and floor of the mouth cancer reporting to SDM Craniofacial research Centre between 2012 to 2014 who will be undergoing resection of the tongue and reconstruction with either Split thickness skin graft (STSG) or radial forearm free flap (RFFF).

- 20 patients with carcinoma of tongue and floor of the mouth are to be involved in the study. Data to be considered for evaluation of speech collected by
 1. Subjective evaluation
 2. Objective evaluation

Subjective evaluation is by Functional Intraoral Glasgow Scale self-questionnaire.

Objective evaluation is by the following variables:

1. Tongue mobility
2. Speech intelligibility
3. Conversational understandability

Key words:

Oral squamous cell carcinoma of tongue, Radial forearm free flap, Skin Graft, Mann

Whitney U test.

ABSTRACT

RESULTS:

1. There was a significant change found in conversational understandability in 1 month and 6 month post operatively since $p = 0.0235^*$ (1month) & 0.0177^* (6month) i.e. $p < 0.05$.
2. There was a significant change found in speech intelligibility in 1 month and 6 month post operatively since $p = 0.0105^*$ (1 month) & 0.0124^* (6month) i.e. $p < 0.05$.
3. Among group I, maximum mean score achieved for protrusion movement at the end of 6 months was 2.80 (maximum 3) & least was retroflexion (1.20). Among group II, maximum score achieved at the end of 6 months follow up was in protrusion, elevation and retraction which was 2.20 & least was retroflexion and protrusion left lateral (1.80).
4. Patient perception about the speech improvements were maximum among family members and least on telephonic conversation and perception of their speech was improved in group I than Group II.

CONCLUSION:

Radial forearm free flap is better alternative to split thickness skin grafting in reconstructing the defect after resecting the carcinoma of tongue in achieving improvement in tongue mobility, speech and thus better quality of life.

Key words:

Oral squamous cell carcinoma of tongue; Radial forearm free flap; Skin Graft; Mann Whitney U test.