



**ASSESSMENT OF QUALITY OF LIFE AND DONOR SITE MORBIDITY
FOLLOWING RECONSTRUCTION IN ORAL CANCER PATIENTS –A
RETRO PROSPECTIVE STUDY**

By

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Dissertation Submitted to the

Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore

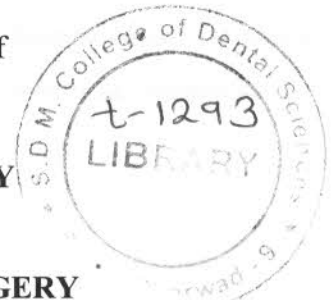
In partial fulfilment

Of the requirements for the degree of

MASTER OF DENTAL SURGERY

In

ORAL AND MAXILLOFACIAL SURGERY



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T-01293

2018-2021

ABSTRACT

INTRODUCTION: Oral cancer has become a global health problem and its increasing incidence and morbidity demands early diagnosis, precise treatment planning, advanced surgical techniques and comprehensive postoperative care to restore near normal life for the patients.

AIMS AND OBJECTIVE: To evaluate the quality of life in oral cancer patients following resection and reconstruction with microvascular free flaps and to evaluate the donor site morbidity in these patients

METHODOLOGY: A prospective study was conducted on oral cancer patients who reported to SDM craniofacial unit between July-2018 to June-2019. A total of 20 patients between 30 to 70 years who underwent resection and reconstruction with microvascular free flaps and who completed the periodic follow ups for 1 year post operatively were included for the study. Patient's general data was analysed for age, gender, medical history and details of site of the lesion, size of the lesion, type of resection, type of flap, type of reconstruction, defect size. The patient's quality of life was subjectively assessed using University of Washington Quality of life version 4. The donor site morbidity was also simultaneously assessed for functional and sensory deficits subjectively and objectively at 3rd, 6th and 1 year postoperatively.

RESULT: According to University of Washington Questionnaire Quality of life the key domains affected by surgery were assessed under physical function, social-emotional function domains. In the physical function domains, the mean

score of taste (mean-91), swallowing (mean-88), speech (mean-81.50), appearance (mean-77.50), saliva (mean-77), chewing (mean-75) at 1 year postoperatively. In the social-emotional domains, the mean score of the parameters 1 year postoperatively were pain (mean-96.25), anxiety (mean-94), mood (mean-91.25), activity (mean- 86.25), recreation (mean-86.25), shoulder (mean-78). The best domains in our study was pain, anxiety, mood and taste sensation, the least scoring domains were chewing, saliva and appearance at 1 year postoperatively. The subjective and objective assessment of the donor site (radial forearm/fibula/anterolateral thigh flap) yielded correlation only in terms of pain. The objective assessment of radial forearm flap showed less morbidity in relation to sensation , however minimal functional deficits in terms of range of motion and muscle strength was observed at 3 months which improved consistently up to 1 year post-operatively. At 1 year post-operatively, the mean radial deviation was 18.58 degree, ulnar deviation was 27.08 degree, grip strength=29.83, mean flexion was 66 degree, extension was 62 degree. The mean plantarflexion and dorsiflexion of the ankle was 38.5 degree, 15 degree respectively at 1 year post-operatively following fibula flap harvesting. The isokinetic muscle strength and ankle strength was preserved. The mean range of motion of hip flexion (122 degree), extension (109 degree), adduction (32 degree), abduction (44 degree), the knee flexion (128.5 degree), extension (109 degree) at 1 year post-operatively following anterolateral thigh flap harvesting. In our study minimal functional sensory and aesthetic deficits was observed in the donor site, however it didn't have any effect on overall quality of life of patients. There was a

significant effect on Quality of life of patient's undergoing extensive resection and reconstruction with fibula free flap reconstruction when compared with radial forearm flap and anterolateral thigh flap. The overall quality of life is dependent on the extent of lesion, site of lesion and type of reconstruction irrespective of patient's general factors.

CONCLUSION: Quality of life questionnaire provides a very effective medium for strengthening surgeon- patient relationship in high volume treatment centres and simultaneous assessment of donor site morbidity provide evidence based insight into the physical, emotional and social issues that patient's face postoperatively which can then direct future interventions in case of absolute necessity.

KEYWORDS: Oral cancer, Quality of life, QOL University of Washington
Quality of life version 4, donor site morbidity