Abstract

Objectives: To assess the outcomes of the platysma myocutaneous flap in the reconstruction of oral cavity cancers in terms of flap survival, complications and quality of life.

Methods: This study is a retrospective review of 10 patients with squamous cell carcinoma of the oral cavity who were treated between the years 2002-2006. Each patient underwent resection of tumor (with soft tissue and bone resection), modified radical neck dissection and primary reconstruction with a platysma myocutaneous flap. OR time, length of stay, time to swallow and complications including flap necrosis and fistulas were assessed. Additionally, The University of Washington Quality of Life Questionnaire (UW-QOL version 4) was administered to each patient.

Results: Average operating time was 3 hours 48 minutes. Average length of stay was 11 days. Average time to swallow was 9 days. There was one distal flap necrosis and one wound dehiscence of the neck. There were no total flap failures or fistulas. The overall quality of life in these patients was excellent.

Conclusions: Theplatysma myocutaneous flap provides thin, pliable, reliable tissue for the oral cavity. The additional operating room time is negligible, the surgical complications minimal and the overall quality of life excellent. This flap should be utilized more often in the reconstruction of oral cavity defects.

Introduction

Despite a long history and many favorable descriptions in the literature, the platysma myocutaneous flap (PMF) is seldom used for oral cavity reconstruction, as the radial forearm free flap is favored by most head and neck surgeons.

However, there are several reasons why this flap should remain in our armamentarium of reconstructive options. The PMF is thin, pliable and reliable. The donor site can be closed primarily with minimal morbidity. Additionally, microvascular surgeons are often unwilling or unavailable to perform free tissue transfer.

The published reports on the PMF most frequently report their outcomes in the form of flap survival (87-100%) and flap complications (0-60%). These parameters do not fully represent the reconstructive outcome achieved by the PMF. The patient’s functional status in regards to speech, swallow and activity are important outcomes, which are generally excluded or only mentioned anecdotally.

The quality of life (QOL) of patients undergoing PMF reconstruction for oral cavity defects has never been described in the aforementioned published reports. Therefore, in addition to other standard outcomes, this pilot study seeks to assess the QOL in these patients.

Methods and Materials

This study is a retrospective review of 10 patients with squamous cell carcinoma of the oral cavity who were treated between the years 2002-2006. Each patient underwent resection of tumor (with soft tissue and bone resection), modified radical neck dissection and primary reconstruction with a PMF. OR time, length of stay, time to swallow and complications including flap necrosis and fistulas were assessed. Additionally, The University of Washington Quality of Life Questionnaire (UW-QOL version 4) was administered to each patient, a minimum of 6 months post-operatively.

Results

Of the 10 PMFs, there was one complication of partial flap necrosis and one minor dehiscence of the donor site which healed secondarily. Segmental or marginal mandibulcetomy was performed in all 10 patients, and the PMF was used to cover exposed bone or reconstructive plates in each case. Average operating time, including tumor extirpation, was under 4 hours. Operating time, including tumor extirpation, was under 4 hours. Average length of stay was 9.5 days. The facial artery was ligated in 3 cases. The status of the external jugular vein was not recorded. Of the 10 PMFs, 4 completed the UW-QOL questionnaire; 2 were deceased; 4 were lost to follow-up. The average score for the first global question was a 50, which corresponds to a health-related QOL of “about the same” as compared to the month before developing cancer. The score of 65 on the second global question corresponds to a “good” to “very good” health related QOL over the past 7 days.

Conclusions

This study adds to the existing body of literature supporting the role of the platysma myocutaneous flap in oral cavity reconstruction. In our experience of 10 patients, the PMF was extremely reliable with just two minor complications. The QOL in these patients was very good overall. The average operating time of less than 4 hours for tumor extirpation and PMF reconstruction underscores the efficiency of this flap.

This study is limited by its retrospective nature and low response rate to the questionnaires. Some patients may have not responded because they have a poor functional status and are unable or unwilling to complete the questionnaire. Ideally, a prospective study should be performed in order to compare the PMF with the radial forearm free flap. Nonetheless, the platysma myocutaneous flap remains an excellent reconstructive option for oral cavity defects.

Bibliography