Evaluation of quality of life and functional outcome in patients with maxillectomy defects either restored with obturators or reconstructed

Dholam KP, Singh GP, Jhamtani R, Yadav P, Bachher G.

- Rehabilitation with obturator and/or reconstruction with osseous/soft tissue flap demonstrated equally high, functional scores and overall global health-related Quality of Life (QOL).
- Patients who had undergone reconstruction experienced greater ‘financial difficulty’ and reduced mouth opening’ as opposed to patients wearing an obturator who reported more ‘weight gain’ instead.
- Subjective evaluation revealed better scores for ‘understandability of speech’ in obturator group.
- Socio-demographic and treatment variables were found to be statistically significantly associated with select items of QOL in both groups of patients.

Introduction

• Microvascular free tissue transfer techniques have become established in recent years, but optimal reconstruction of maxillectomy defects remains a matter of debate1.
• Reconstruction Vs. Obturator - ?
  Age, Co-morbidities, Size and Location of defect, Surgeon’s expertise.
• Prosthetic obturator remains the most common rehabilitative approach for patients to achieve nearly normal appearance and function, thus restoring their quality of life (QOL)2.

Aim

• To evaluate QOL (EORTC QLQ C-30 and HN-35, PSS-HN) and functional outcome in patients with maxillectomy defects prosthectically rehabilitated with an obturator or reconstructed with osseous/soft tissue flap.
• To study effect of specific socio-demographic and treatment variables on QOL (using EORTC, PSS-HN and acoustic speech parameters tools).

Materials and Methodology

• Clinical records were reviewed to record demographic details.
• QOL measure: EORTC QLQ C-30 and H&N-35
  Performance Status Scale (PSS-HN)
• Acoustic Speech assessment: Done by speech therapist using Dr. Speech Software version 4 (Tiger DRS, Inc., Seattle) analyzing various speech parameters.

Results

• Obturator and Reconstruction group cannot be statistically compared as they are essentially two different clinical situations.
• Qualitative analysis:-
• QOL measure:-
  • Single-item scale of ‘financial difficulty’ (QLQ C-30) was rated highest in ‘Reconstruction group’ suggesting economic impact of cost of treatment.
  • Patients who underwent reconstruction had more problems with ‘mouth opening’.
  • Patients wearing obturator reported higher ‘weight gain’, possibly due to ease of mouth opening.
• PSS-HN measure:-
  • Patients rated ‘Understandability of speech’ better in obturator group though objective speech assessment with software did not reveal any difference.
• Acoustic speech assessment
  • No differences between the two groups observed.
• Influence of treatment variables on QOL
  • Obturator group: Radiated patients experienced problem of ‘sticky saliva’, ‘loss of appetite’ and ‘trouble with social contact’. Patients with stage IV disease experienced higher levels of ‘trouble with social contact’.

A prospective, longitudinal study analyzing and comparing the influence on QOL of patients undergoing prosthetic rehabilitation with an obturator Vs. flap reconstruction of maxillary defects is desirable.

Frequency distribution of demographic data