Early reintroduction of oral feeding following surgery with free flap reconstruction for oral cancer

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Background

In the United Kingdom, patients can remain nil by mouth for up to 12 days post-operatively following resection for oral cancer with free flap reconstruction, to allow for adequate time for healing and to reduce the potential risk of flap dehiscence/ poor healing [1]. This has resulted in variation across institutions in the timing and nature of speech language pathology (SLP) input in the early post-operative phase. There has been an increasing focus in the literature on the early introduction of oral feeding post-operatively with no evidence of increased risk of post operative complications [1,2,3]. An evaluation of the impact of early oral feeding after free flap reconstruction for oral cancer was undertaken.

Method

A retrospective observational study was undertaken involving consecutive patients, treated at a single, tertiary cancer centre, who required radical surgical resection with free flap reconstruction for oral cancer. Data recorded included the disease site and staging, type of flap reconstruction performed, need for and duration of tracheostomy, length of hospital stay, method and duration of enteral feeding, day of re-introduction of oral feeding, complications and swallowing status using the Performance Status Scale for Head and Neck Cancer Normalcy of Diet (PSS-NOD) [4] scores at point of discharge.

Table 1: Patient demographics, site of disease, method of reconstruction

	n=29
Sex	Male: 17 Female: 12
Age (mean, range)	68.5 years (range: 56-81)
Tumour site	oral tongue (n=10) maxilla (n=6) mandible (n=6) floor of mouth (n=5) buccal mucosa (n=2)
Method of reconstruction	anterolateral thigh (n=11) fibular (n=7) radial forearm (n=6) medial sural artery free flap (n=5)

Results

Twenty nine consecutive patients, at a single, tertiary cancer centre underwent radical surgical resection with free flap reconstruction for oral cancer between January 2018 and December 2019. Patient demographics including age, sex and, site and staging of disease and method of reconstruction are summarised in table 1. The majority of patients (68%, n=19) had stage IV disease. One patient with high grade sarcoma was also included. Tracheostomy was required for 11 patients with median time to decannulation at 7 days (range 3-20 days). The majority of patients were able to tolerate oral fluids on day one post operatively (86%, n=25). Non oral feeding was required in 90% of patients (n=26) including 45% who required gastrostomy placement (n=13). Number of days of enteral feeding, duration of hospital stay, and mean PSS-NOD score are summarised in table 2. Flap failure was noted in one patient.

Table 2: Duration of naso-gastric feeding, hospital stay and PSS-HN normalcy of diet at point of discharge

	n=29
Duration of naso-gastric feeding (median, range)	6 days (range 3-15 days)
Duration of hospital stay (median, range)	10 days (range 3-51)
PSS normalcy of diet on day of discharge	36.55 (95% CI: 30.9-42.2)

Conclusion

The adoption of early oral intake as part of an enhanced recovery package for patients who had reconstructive surgery for oral cancer did not increase morbidity or adverse outcome and resulted in a shorter hospital stay.

References

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