

Clinical and Patient Reported Outcomes After Free Flap Reconstruction of Posterolateral Mandible Defects

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Background

- Defects of the posterolateral mandible may be reconstructed with a bony or soft tissue flap depending on multiple clinical factors.
- Previous evaluations have demonstrated comparable clinical and functional outcomes after bony vs. soft tissue flap reconstruction.
- Patient reported outcomes between these two cohorts using FACE-Q have yet to be assessed.

Objective

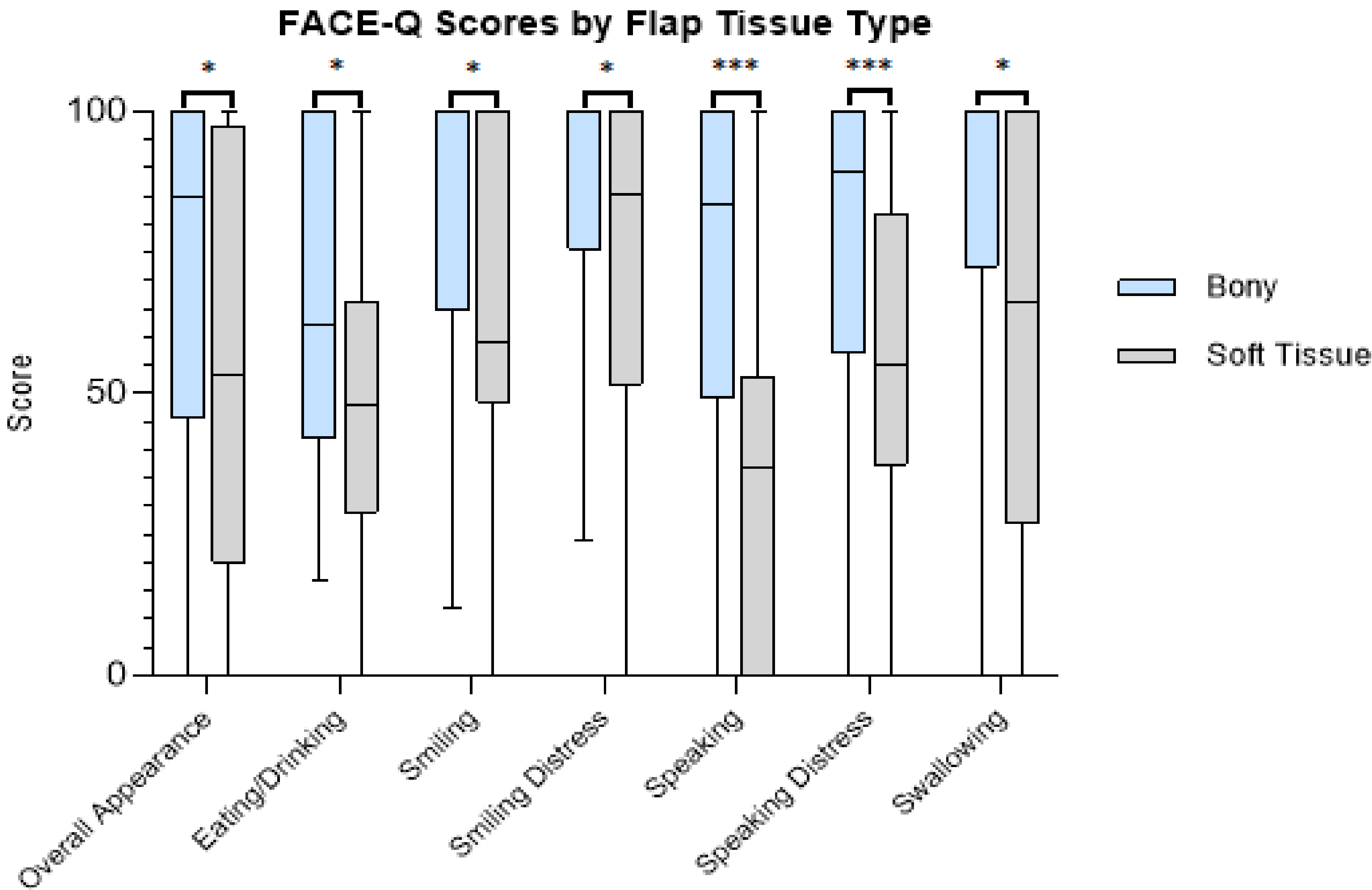
- Describe and compare clinical and patient reported outcomes of osseous vs. soft tissue reconstruction of posterolateral mandible defects.

Methodology

- Retrospective review from 2006-2021 of adult patients who underwent posterolateral mandible resection and immediate free flap reconstruction
- Cohorts were defined by receipt of an osseous vs. soft tissue free flap.
- Outcomes evaluated included postoperative complication profile and FACE-Q scores.
- Major complication: Return to OR
Short-term: <1 year after reconstruction
Long-term: >1 year after reconstruction

Results

Recipient site complications						
	Short-term (0-1 year)			Long-term (>1 year)		
	Bony	Soft	p value	Bony	Soft	p value
Overall	61 (67.8%)	15 (62.5%)	0.633	20 (22.2%)	3 (12.5%)	0.396
Major	16 (17.8%)	3 (12.5%)	0.760	14 (15.6%)	2 (8.3%)	0.516
Minor	45 (50%)	12 (50%)	1.000	6 (6.7%)	1 (4.12)	1.000
Specific complications						
Hematoma/Seroma	5 (5.6%)	1 (4.2%)	1.000	0 (0%)	0 (0%)	N/A
Wound Dehiscence	15 (16.7%)	8 (33.3%)	0.088	2 (2.2%)	0 (0%)	1.000
Wound infection/Cellulitis	8 (8.9%)	2 (8.3%)	1.000	9 (10.0%)	0 (0%)	0.200
Abscess	28 (31.1%)	5 (20.8%)	0.449	1 (1.1%)	1 (4.2%)	0.378
Fistula	12 (13.3%)	4 (16.7%)	0.742	6 (6.7%)	1 (4.2%)	1.000
Osteoradionecrosis	4 (4.4%)	2 (8.3%)	0.604	11 (12.2%)	2 (8.3%)	0.733
Hardware exposure	5 (5.6%)	0 (0%)	0.582	9 (10.0%)	0 (0%)	0.200
Total flap loss	0 (0%)	0 (0%)	N/A	1 (1.1%)	0 (0%)	1.000
Partial flap loss	1 (1.1%)	0 (0%)	1.000	0 (0%)	0 (0%)	N/A
Flap compromise	5 (5.6%)	0 (0%)	0.582	0 (0%)	0 (0%)	N/A



Conclusions

- Recipient site complication rates between osseous and soft tissue reconstruction of posterolateral mandible defects are comparable.
- Osseous flaps appear to perform better than soft tissue flaps in multiple FACE-Q domains.

References

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