

Patient	OAEI with mid. pharyngeal muscle measures: OAEI threshold ≥ 5																							ALL PATIENTS			
	S8	S13	S18	S11	S6	S2	S24	S5	S16	S22	S1	AVG	SD	S3	S10	S17	S4	S9	S21	S14	S20	S12	AVG	STDEV	AVG	SD	P
ANB (deg)	2	0	0	2	2	0	0	2	0	0	2	0.9	1.0	0	2	0	0	2	0	0	2	0	0.7	1.0	0.79	1.01	0.30
WITS (FOP) (mm)	0	0	0	1	1	1	1	0	0	0	0	0.4	0.5	0	0	0	0	0	0	0	1	0	0.1	0.3	0.24	0.44	0.10
ODI	3	0	0	0	3	3	3	3	0	3	3	1.9	1.5	0	0	0	3	0	0	0	0	3	0.7	1.3	1.29	1.53	0.03
Delta mid. pharyngeal muscle	2	0	0	2	2	2	1	0	0	2	2	1.2	1.0	0	0	2	2	0	0	2	1	2	1.0	1.0	1.09	0.97	0.34
OAEI score	7	0	0	5	8	6	5	5	0	5	7	4.4	3.0	0	2	2	5	2	0	2	4	5	2.4	1.9	3.40	2.67	0.05
OAEI Score ≥ 5	y	n	n	y	y	y	y	y	n	y	y			n	n	n	y	n	n	n	n	y					
Successful prediction	8 out of 11											7 out of 9															
Successful prediction (%)	73											78															
Combined Accuracy	(78%+73%)/2= 75.5% accuracy																										

Scoring Criteria: ANB > 4, WITS > 3, ODI > 70, Change in mid. pharyngeal muscle length > -3.

Table 4. OAEI calculations including the middle pharyngeal muscle length change. Both good and poor responder types were evaluated with the OAEI point scoring and compared to their expected response type. Eight of the 11 “good” good responder types matched their predictions (denoted by a green box with “y”) by achieving an OAEI score of greater than or equal to 5 yielding a 73% accuracy. Of the poor responders, seven of nine were consistent with their response type (denoted by a red box with “n”) by obtaining an OAEI less than 5 yielding an accuracy rate of 78%. The pooled data from both responder types obtained 75.5% accuracy. OAEI = oral appliance efficiency index; ODI = overbite depth indicator.