

Table 1: Descriptive analysis of subjective parameters

	Mean	SD
Velar length	1.075	0.55
Velar thickness	1.05	0.48
Velar movement	2.21	0.87
Velar height	1.68	0.75
Passavant ridge	0.25	0.52
Adenoid enlargement	0.3	0.84
Tongue assisted movement	0.98	0.67

Table 2: Descriptive analysis of objective parameters

	mean	SD
Resting palatal length	0.85	0.21
Total length in /i/ sound	0.92	0.23
Functional velar Length	0.48	0.14
Remaining velar length	0.43	0.14
Resting velar thickness	0.27	0.08
Velar thickness with /i/ sound	0.28	0.09
Resting gap	0.25	0.09
Gap with /i/ sound	0.14	0.09
Velar angle	122.36 degree	17.12
Closure ratio	0.46	0.29
Palatal extensibility	0.14	32.76

Table 3: Subjective velar change with the operation

Parameters	Pre-operative (Mean/+SD)	6 months after the operation (Mean/+SD)	P value
Velar Length	0.37+0.68	1.78+0.41	0.000
Velar Thickness	0.42+0.50	1.68+0.47	0.000
Velar Movement	1.68+0.74	2.7368+0.99	0.008
Velar Height	1.36 + 0.68	2.0000 + 0.81	0.005

Table 4: Changes in the objective velar parameters with the operation

	Pre-operative (Mean/+SD)	6 month postoperative (Mean/+SD)	P value
Resting palatal length	0.68±0.21	1.01±0.22	0.001
Total length in /i/ sound	0.71±0.20	1.13±0.25	0.001
Functional velar Length	0.36±0.11	0.60±0.16	0.001
Remaining velar length	0.34±0.11	0.52±0.16	0.008
Resting velar thickness	0.18±0.07	0.35±0.09	0.001
Velar thickness with /i/ sound	0.20±0.07	0.39±0.11	0.001
Resting gap	0.28±0.09	0.21±0.09	0.012
Gap with /i/ sound	0.21±0.12	0.07±0.07	0.001
Closure ratio	0.32±0.23	0.71±0.35	0.003
Palatal extensibility	16.6±62.96	12.94±19.73	0.570

Table (5): subjective and objective assessment of the palate using Mann-whitney U test. The level of significance was set at P value = .01

	Subjective assessment (mean \pm SD)	Objective assessment (mean \pm SD)	P value
Velar Length	0.68 \pm 0.21	0.47 \pm 0.74	0.113
Velar thickness	0.35 \pm 0.09	0.53 \pm 0.52	0.752