

Supplementary Table S1. Changes from Preoperative Baseline of Smile Functionally Parameters Across Facial Nerve Palsy Etiology.

Factor	Moebius Syndrome	Iatrogenic	Hemifacial Microsomia	Goldenhar Syndrome	P Value
N	12	2	6	1	
<i>Commissure excursion (mm)</i>					
Postop 1 yr, median (IQR)	8.3 (1.8, 14.6)	17.2 (11.0, 23.4)	3.6 (-5.1, 10.4)	19.1 (19.1, 19.1)	0.13
<i>Dental show (mm)</i>					
Postop 1 yr, median (IQR)	0.0 (0.0, 1.1)	0.6 (-0.3, 1.5)	0.0 (-0.2, 0.4)	-0.1 (-0.1, -0.1)	0.61
<i>Smile angle (deg)</i>					
Postop 1 yr, median (IQR)	6.7 (-0.7, 9.7)	6.9 (6.1, 7.6)	-0.7 (-3.3, 2.7)	5.3 (5.3, 5.3)	0.26

Supplementary Table S2. Changes from Preoperative Baseline of Smile Functionally Parameters Across Innervation Technique.

Factor	Ipsilateral Neurorrhaphy	Cross-face nerve graft	P Value
N	14	7	
<i>Commissure excursion (mm)</i>			
Postop 1 yr, median (IQR)	10.0 (2.3, 16.3)	9.0 (-5.1, 11.0)	0.37
<i>Dental show (mm)</i>			
Postop 1 yr, median (IQR)	0.0 (0.0, 0.6)	0.0 (-0.3, 0.5)	0.32
<i>Smile angle (deg)</i>			
Postop 1 yr, median (IQR)	5.5 (0.3, 9.0)	1.2 (-3.3, 6.1)	0.20

Supplementary Table 3. Changes from Preoperative Baseline of Smile Symmetry Parameters Across Facial Nerve Palsy Etiology.

Factor	Moebius Syndrome	Iatrogenic	Hemifacial Microsomia	Goldenhar Syndrome	P Value
N	12	2	6	1	7
<i>Commissure excursion deviation (mm)</i>					
Postop 1 yr, median (IQR)	-1.0 (-4.3, 2.6)	-13.9 (-16.7, -11.0)	-3.3 (-5.3, -1.8)	-2.0 (-2.0, -2.0)	0.20
<i>Commissure height deviation (mm)</i>					
Postop 1 yr, median (IQR)	-0.2 (-5.0, 5.0)	-6.4 (-6.4, -6.3)	-0.1 (-2.0, 0.4)	-8.8 (-8.8, -8.8)	0.17
<i>Dental show deviation (mm)</i>					
Postop 1 yr, median (IQR)	0.0 (-0.3, 0.1)	0.6 (0.1, 1.0)	-0.8 (-2.5, 0.6)	-6.7 (-6.7, -6.7)	0.22
<i>Smile angle deviation (mm)</i>					
Postop 1 yr, median (IQR)	-0.5 (-3.1, 4.0)	-4.0 (-4.9, -3.1)	-0.1 (-1.7, 1.4)	-6.8 (-6.8, -6.8)	0.29
<i>Upper lip height deviation (mm)</i>					
Postop 1 yr, median (IQR)	-1.7 (-4.0, 1.4)	-4.9 (-5.8, -4.1)	-1.5 (-4.2, 1.2)	-11.6 (-11.6, -11.6)	0.23
<i>Lower lip height deviation (mm)</i>					
Postop 1 yr, median (IQR)	0.2 (-1.0, 0.8)	-0.7 (-3.3, 1.8)	-1.0 (-2.2, -0.5)	0.4 (0.4, 0.4)	0.62

Supplementary Table S4. Changes from Preoperative Baseline of Smile Symmetry Parameters Across Innervation Technique.

Factor	Ipsilateral Neuroorrhaphy	Cross-face Nerve Graft	P Value
N	6	7	
<i>Commissure excursion deviation (mm)</i>			
Postop 1 yr, median (IQR)	-1.9 (-10.9, -0.3)	-5.3 (-11.0, -3.2)	0.48
<i>Commissure height deviation (mm)</i>			
Postop 1 yr, median (IQR)	-3.2 (-8.8, -0.0)	-2.0 (-6.3, -0.0)	0.67
<i>Dental show deviation (mm)</i>			
Postop 1 yr, median (IQR)	-0.7 (-4.8, 0.0)	0.1 (-2.5, 1.0)	0.32
<i>Smile angle deviation (mm)</i>			
Postop 1 yr, median (IQR)	-3.1 (-6.8, -0.9)	-1.7 (-3.2, 1.4)	0.20
<i>Upper lip height deviation (mm)</i>			
Postop 1 yr, median (IQR)	-3.9 (-11.6, -0.4)	-4.1 (-4.2, 1.2)	0.47
<i>Lower lip height deviation (mm)</i>			
Postop 1 yr, median (IQR)	-0.4 (-1.6, 0.4)	-1.2 (-3.3, 1.8)	0.57