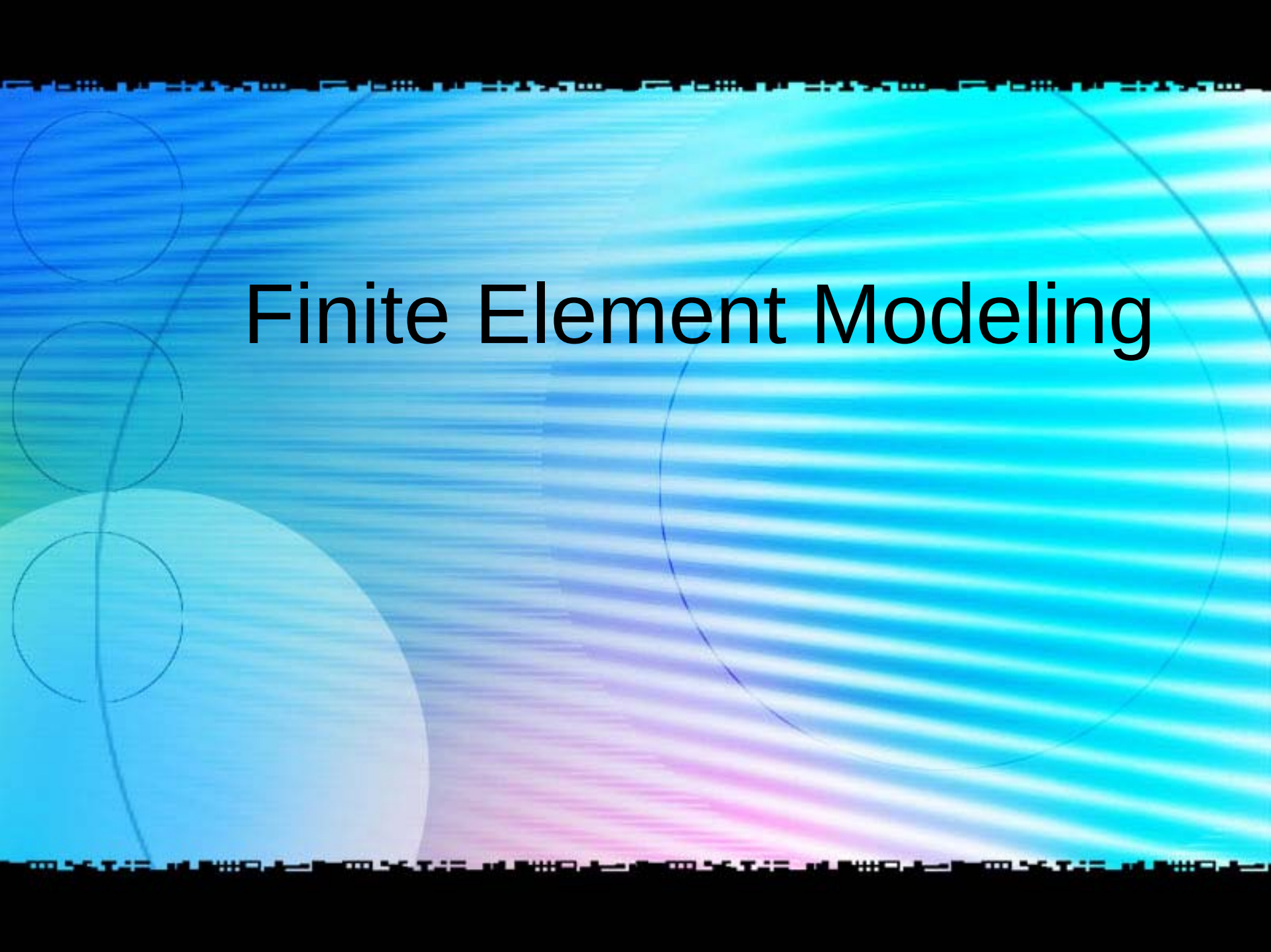




Finite Element Modeling

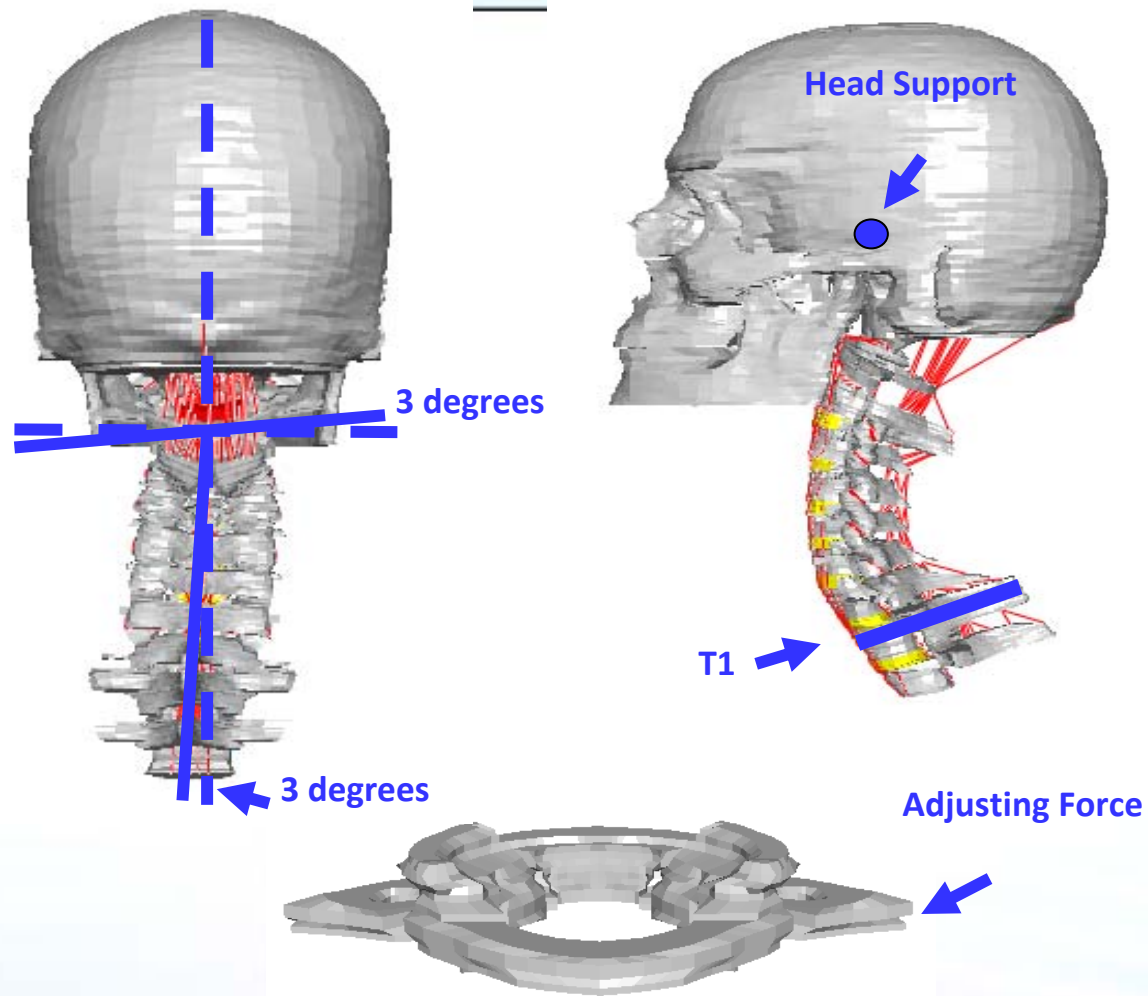


Figure 1: The misaligned FE model and the boundary/loading conditions for simulating NUCCA chiropractic adjustment

Angle of Adjusting Force	Magnitude of Adjusting Force	C1 Laterality
13°	12.18 N	0.82°
16°	11.37 N	0.34°
19°	10.27 N	0.15°
22°	9.91 N	-0.05°
25°	9.86 N	-0.44°
28°	10.67 N	-0.94°

Table 1: The predicted magnitude of adjusting force and post adjustment C1 Laterality for six adjusting angles from 13°–28°

	Pre-adjustment	Post-orientation	Post-adjustment
C1 Laterality	3.00°	6.50°	-0.05°
Angular Rotation	3.00°	1.84°	0°

Table 2: The Pre- and Post-adjustment misalignment parameters in the FE model at 22° adjusting angle

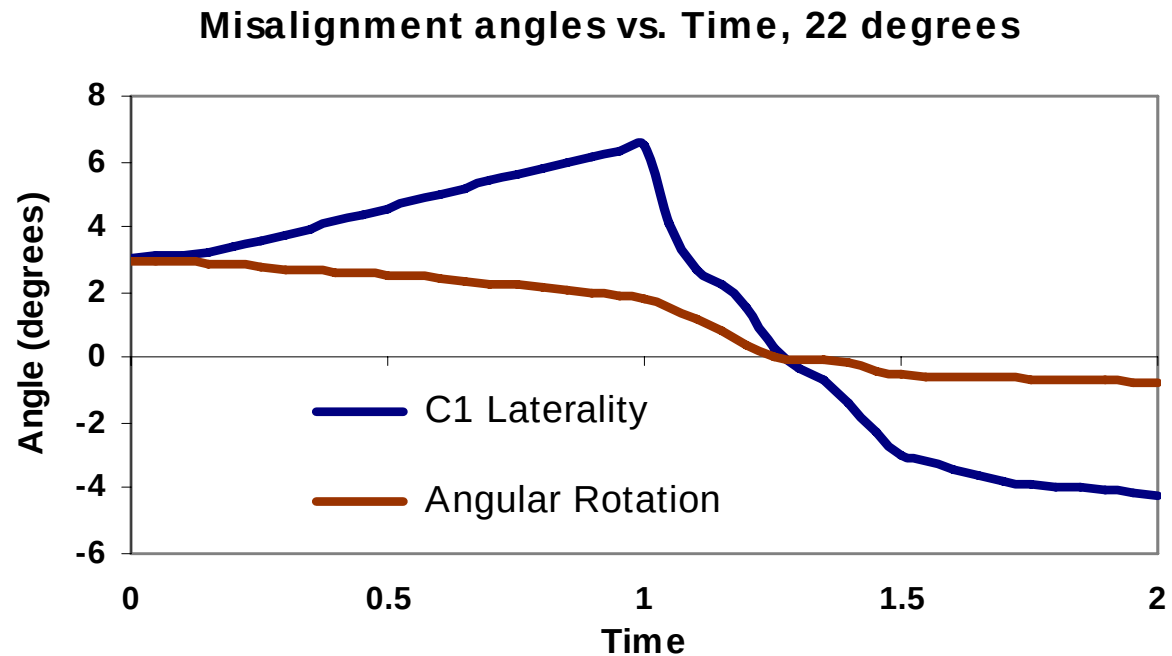


Figure 2: The predicted misalignment angles vs. Time at 22° adjusting angle

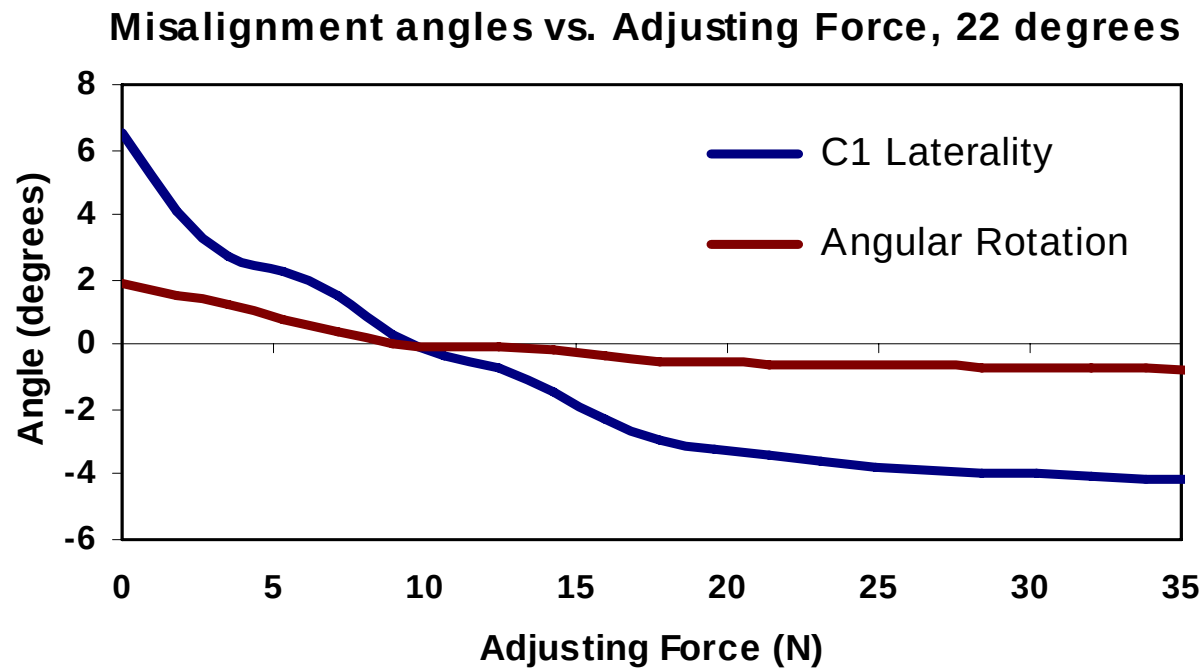


Figure 3: The predicted relationship between misalignment parameters and adjusting force