



Figure 1. Evaluation of thoracic curve with flexible line



Figure 2. Evaluation of the head and shoulder protrusion

Table 1. The mean of demographic variables in the control and case groups (n=12 per group)

Demographic variables	Control group	Case group	t	P value
Age (year)	43.00±11.23	39.08±5.08	1.10	0.28
Weight (kg)	61.25±9.91	54.50±8.73	1.76	0.09
Sitting height (cm)	78.25±3.95	77.25±3.22	0.67	0.50

Table 2. The effect of 8 weeks of corrective training program on anomalies in the case and control groups the (intragroup and intergroup comparisons)

Variables	Control group	Case group	Independent T-test results
Degrees of kyphosis			
Pre-test	56.25±2.89	56.16±2.48	p=0.94; t=0.07
Post-test	56.33±2.70	52.91±2.19	p=0.003; t=3.39
Paired sample t-test results	p=0.77; t=0.29	p=0.001; t=9.26	-
Degree of forward head posture			
Pre-test	51.33±2.49	51.25±2.49	p=0.93; t=0.08
Post-test	51.33±2.57	47.16±1.89	p=0.001; t=4.51
Paired sample t-test results	p=1.0; t=0.001	p=0.001; t=9.04	-
Degree of rounded shoulders			
Pre-test	56.08±2.57	56.58±2.57	p=0.63; t=0.47
Post-test	56.00±2.73	51.83±2.69	p=0.001; t=3.76
Paired sample t-test results	p=0.77; t=0.29	p=0.001; t=11.57	-

Table 3. Results of one-way analysis of variance test to evaluate the degree of anomalies in different sports classes

Variables	Class 1 to 1.5	Class 2 to 2.5	Class 3 to 4.5	F	P value
Degrees of kyphosis	58.37±1.50	57.12±0.99	53.12±1.55	31.88	0.001
Degree of forward head posture	53.00±1.41	52.50±1.51	48.37±0.74	31.95	0.001
Degree of rounded shoulders	58.62±1.30	56.50±1.51	53.87±2.03	16.76	0.001