

APPENDIX A

Data of all variable assessments

Table A.1 Ages (years) and sexes of the control group

Case No.	Sex	Age (yrs)	Case No.	Sex	Age (yrs)	Case No.	Sex	Age (yrs)
1	1	21.0	21	1	21.1	41	2	20.5
2	1	20.5	22	1	22.7	42	2	18.5
3	1	25.9	23	1	21.2	43	2	18.8
4	1	20.1	24	1	19.0	44	2	18.3
5	1	20.6	25	2	17.2	45	2	19.8
6	1	17.5	26	1	20.7	46	2	18.5
7	1	20.3	27	1	20.9	47	2	18.8
8	1	20.9	28	1	20.6	48	2	15.6
9	1	20.4	29	1	20.3	49	2	16.0
10	1	20.8	30	2	19.8	50	2	20.4
11	1	20.0	31	2	18.7	51	2	18.7
12	1	25.5	32	2	17.5	52	2	18.0
13	1	20.1	33	2	21.1	53	2	17.2
14	1	20.1	34	2	19.2	54	2	16.9
15	1	23.0	35	2	19.6	55	2	17.9
16	1	22.3	36	2	20.2	56	2	19.8
17	1	21.4	37	2	28.8	57	2	19.6
18	1	22.9	38	2	25.2	58	2	19.4
19	1	23.5	39	2	22.0	59	2	20.6
20	1	22.7	40	2	17.5			

1, Male; 2, Female.

Table A.2 Ages (years) and sexes of the patients with different skeletal relationships

Skeletal type	Case No.	Sex	Age (yrs)	Skeletal type	Case No.	Sex	Age (yrs)	Skeletal type	Case No.	Sex	Age (yrs)
I	60	2	20.0	II	80	2	19.0	III	100	1	16.0
	61	2	17.0		81	2	23.0		101	2	18.0
	62	2	18.0		82	1	17.0		102	2	16.0
	63	2	16.0		83	2	15.0		103	2	17.0
	64	2	20.0		84	2	21.0		104	2	24.0
	65	2	19.0		85	1	15.0		105	1	22.0
	66	2	16.0		86	2	20.0		106	2	24.0
	67	2	20.0		87	1	16.0		107	2	22.0
	68	2	18.0		88	2	16.0		108	2	22.0
	69	2	16.0		89	1	18.0		109	2	15.0
	70	1	20.0		90	2	28.0		110	2	20.0
	71	1	22.0		91	2	16.0		111	2	18.0
	72	2	20.0		92	1	17.0		112	2	21.0
	73	2	15.0		93	1	20.0		113	2	18.0
	74	2	17.0		94	2	20.0		114	1	15.0
	75	1	15.0		95	2	15.0		115	2	23.0
76	1	23.0	96	1	19.0	116	2	17.0			
77	2	15.0	97	2	15.0	117	2	26.0			
78	2	16.0	98	2	19.0	118	2	17.0			
79	2	22.0	99	1	15.0	119	2	16.0			

1, Male; 2, Female.

Table A.3 Lateral cephalometric measurements in the control group

Case No.	SNA (deg)	SNB (deg)	ANB (deg)	FH - MP (deg)	UAFH (mm)	LAFH (mm)	TAFH (mm)	LAFH ratio (%)
1	87.9	85.1	2.9	23.6	62.1	72.5	134.6	53.9
2	87.2	82.7	4.6	21.6	58.6	72.9	131.5	55.4
3	86.6	85.7	0.9	17.2	58.7	71.3	130.0	54.9
4	85.5	82.3	3.2	15.7	61.5	62.0	123.5	50.2
5	77.3	73.9	3.4	30.2	61.6	72.2	133.7	53.9
6	82.9	80.5	2.4	20.1	60.8	65.0	125.8	51.7
7	94.0	89.4	4.6	21.1	57.9	67.8	125.7	54.0
8	84.5	83.9	0.6	15.3	58.0	69.2	127.2	54.4
9	83.7	81.8	1.9	21.8	58.6	73.3	131.9	55.6
10	81.6	79.7	1.8	20.1	60.3	65.5	125.8	52.1
11	86.4	81.4	5.0	17.8	52.3	66.5	118.8	56.0
12	84.1	77.6	6.5	10.8	57.9	67.3	125.2	53.8
13	81.5	77.8	3.7	25.7	61.8	67.2	129.0	52.1
14	89.6	85.0	4.5	18.5	60.2	73.5	133.7	55.0
15	80.5	82.1	-1.6	16.7	59.1	64.9	124.0	52.3
16	86.9	84.0	2.8	21.3	55.9	70.4	126.3	55.8

Table A.3 (continued)

Case No.	SNA (deg)	SNB (deg)	ANB (deg)	FH - MP (deg)	UAFH (mm)	LAFH (mm)	TAFH (mm)	LAFH ratio (%)
17	80.9	77.4	3.5	25.1	63.8	72.3	136.1	53.1
18	81.2	79.3	1.9	28.0	60.4	77.9	138.3	56.3
19	81.7	80.9	0.7	21.5	59.2	61.3	120.5	50.9
20	81.1	79.5	1.6	17.3	62.9	69.1	132.0	52.3
21	84.8	81.5	3.3	18.0	55.7	70.0	125.7	55.7
22	84.8	80.7	4.1	21.3	56.8	67.0	123.8	54.1
23	82.5	81.0	1.5	28.7	60.2	77.8	138.0	56.4
24	88.1	85.3	2.8	14.7	57.0	66.6	123.6	53.9
25	85.9	84.7	1.2	19.7	54.5	63.5	118.0	53.8
26	88.5	83.5	5.0	24.2	58.7	65.2	123.8	52.6
27	85.6	82.6	3.0	21.8	61.0	68.9	129.9	53.0
28	79.8	77.6	2.3	22.0	65.5	65.1	130.6	49.8
29	90.5	89.7	0.8	11.0	56.8	66.4	123.2	53.9
30	89.7	83.4	6.4	28.0	55.4	70.6	126.0	56.0
31	84.6	79.3	5.2	17.2	56.8	60.5	117.3	51.6
32	80.9	76.7	4.3	19.1	51.8	59.3	111.1	53.4
33	78.9	78.2	0.7	28.8	58.1	71.8	129.9	55.3
34	84.9	82.3	2.6	19.0	52.2	60.5	112.7	53.7
35	81.3	79.8	1.5	26.4	61.9	67.0	128.9	52.0
36	82.6	79.1	3.5	22.3	56.4	62.2	118.6	52.4
37	78.7	76.8	1.9	25.3	60.6	65.2	125.8	51.8
38	84.0	79.9	4.1	24.0	54.7	66.9	121.7	55.0
39	84.1	82.7	1.4	17.9	55.2	66.9	122.1	54.8
40	91.6	91.0	0.6	19.4	55.2	63.0	118.2	53.3
41	83.2	83.2	0.0	12.4	54.9	64.3	119.2	54.0
42	80.9	78.9	2.0	18.2	54.3	67.9	122.2	55.6
43	88.8	84.3	4.5	17.4	53.4	58.9	112.4	52.5
44	87.5	83.1	4.3	18.8	56.0	66.1	122.1	54.1
45	85.4	80.8	4.5	29.8	59.5	64.7	124.2	52.1
46	85.3	82.1	3.2	30.3	54.7	72.1	126.8	56.9
47	85.8	82.0	3.8	16.2	56.0	64.0	120.0	53.3
48	79.8	78.1	1.7	20.7	57.0	59.0	116.0	50.9
49	90.4	86.7	3.7	23.2	55.6	65.0	120.6	53.9
50	83.5	80.7	2.8	29.5	55.6	65.5	121.1	54.1
51	82.3	78.5	3.8	16.7	55.1	52.5	107.6	48.8
52	82.4	82.0	0.3	21.8	55.2	68.0	123.3	55.2
53	82.8	78.7	4.1	28.4	57.5	65.7	123.2	53.4
54	80.6	78.7	1.9	23.1	59.8	68.5	128.3	53.4
55	83.8	81.5	2.2	14.7	57.0	63.2	120.3	52.6
56	85.3	81.6	3.7	23.1	52.2	67.4	119.7	56.4
57	85.4	81.3	4.2	11.3	59.7	68.5	128.2	53.4
58	83.5	79.5	4.0	14.8	57.4	68.3	125.7	54.3
59	86.1	82.6	3.5	18.7	55.9	68.4	124.4	55.0

Table A.4 Lateral cephalometric measurements in the patients with different skeletal relationships

Skeletal type	Case No.	SNA	SNB	ANB	FH - MP	UAFH	LAFH	TAFH	LAFH ratio
		(deg)	(deg)	(deg)	(deg)	(mm)	(mm)	(mm)	(%)
I	60	83.6	81.0	2.6	33.0	56.6	65.6	122.2	53.7
	61	79.8	77.8	2.0	22.1	54.7	70.0	124.7	56.1
	62	84.4	83.4	1.0	20.9	55.9	70.5	126.4	55.8
	63	80.4	78.1	2.3	24.8	58.4	54.8	113.2	48.4
	64	86.3	82.8	3.6	24.3	54.5	61.5	116.0	53.0
	65	89.1	85.1	4.0	18.9	52.6	65.5	118.1	55.5
	66	83.4	79.0	4.4	24.4	57.3	65.5	122.9	53.3
	67	84.7	80.9	3.8	24.0	54.8	66.2	121.0	54.7
	68	82.6	80.6	2.1	27.7	62.5	79.7	142.3	56.0
	69	80.8	77.1	3.7	34.4	49.5	76.2	125.6	60.6
	70	80.5	77.9	2.6	29.4	58.0	63.1	121.1	52.1
	71	83.0	79.1	4.0	31.0	63.9	69.3	133.2	52.0
	72	82.9	80.6	2.3	25.4	54.9	72.4	127.3	56.9
	73	83.5	79.7	3.8	23.1	58.7	70.7	129.4	54.6
	74	82.8	80.6	2.2	30.9	65.5	76.4	141.9	53.9
	75	80.9	77.1	3.7	26.5	59.7	69.9	129.6	54.0
	76	83.7	80.7	3.1	33.4	61.7	79.0	140.7	56.2
	77	86.4	83.0	3.4	25.1	57.3	64.6	121.9	53.0
	78	84.0	80.7	3.4	16.1	52.2	63.1	115.3	54.7
79	86.7	84.9	1.9	23.4	57.5	71.7	129.2	55.5	
II	80	90.9	83.3	7.6	28.4	60.9	73.0	133.9	54.5
	81	86.6	77.5	9.2	23.8	57.4	65.5	122.9	53.3
	82	82.6	74.5	8.1	33.0	62.9	69.4	132.2	52.5
	83	82.3	73.7	8.6	28.2	61.3	71.6	132.9	53.9
	84	90.0	81.0	9.0	21.6	59.6	65.6	125.2	52.4
	85	92.0	86.1	5.9	25.6	54.2	73.8	128.0	57.6
	86	77.2	71.5	5.7	30.5	62.2	66.6	128.8	51.7
	87	81.0	75.6	5.5	27.6	59.7	67.6	127.3	53.1
	88	80.8	72.5	8.3	38.3	60.3	86.8	147.0	59.0
	89	84.7	79.3	5.3	24.5	53.0	73.5	126.5	58.1
	90	87.1	77.9	9.2	39.1	61.2	68.7	129.9	52.9
	91	87.2	78.9	8.3	36.1	61.3	75.7	137.0	55.3
	92	84.0	75.5	8.5	23.4	58.5	62.7	121.2	51.7
	93	82.0	75.0	6.9	24.3	56.4	67.7	124.2	54.5
	94	85.1	78.9	6.2	24.9	67.5	74.4	141.8	52.4
	95	83.3	76.5	6.8	26.4	57.5	65.4	122.9	53.2
	96	87.5	81.6	6.0	16.2	63.7	66.2	129.9	50.9
	97	83.2	77.0	6.2	25.0	56.4	58.1	114.5	50.7
	98	91.9	85.0	6.9	24.1	56.2	71.0	127.3	55.8
99	86.2	79.9	6.3	19.2	57.6	59.2	116.8	50.7	

Table A.4 (continued)

Skeletal type	Case No.	SNA	SNB	ANB	FH - MP	UAFH	LAFH	TAFH	LAFH ratio
		(deg)	(deg)	(deg)	(deg)	(mm)	(mm)	(mm)	(%)
III	100	81.6	87.1	-5.5	21.7	55.5	56.5	112.0	50.4
	101	83.4	88.6	-5.2	33.8	54.9	75.6	130.5	57.9
	102	80.9	87.1	-6.3	26.0	54.5	63.9	118.4	54.0
	103	81.0	85.4	-4.4	16.9	57.0	62.4	119.5	52.3
	104	82.8	88.6	-5.7	18.6	56.3	74.2	130.4	56.9
	105	93.4	93.9	-0.4	17.5	57.9	73.1	131.0	55.8
	106	82.8	84.0	-1.2	26.8	56.5	66.6	123.2	54.1
	107	75.7	80.3	-4.6	25.2	55.4	68.1	123.5	55.1
	108	85.1	86.3	-1.1	16.7	54.2	70.2	124.4	56.4
	109	83.1	83.5	-0.4	31.6	56.1	72.8	128.9	56.5
	110	83.0	84.7	-1.6	25.1	53.2	66.9	120.1	55.7
	111	80.2	82.5	-2.2	26.4	52.0	70.0	122.1	57.4
	112	82.1	89.4	-7.3	20.4	53.6	58.9	112.5	52.4
	113	84.5	85.0	-0.5	28.3	55.9	74.5	130.4	57.2
	114	77.2	77.3	-0.1	27.5	57.4	75.2	132.5	56.7
	115	84.0	86.0	-2.1	19.6	51.9	63.0	114.9	54.8
	116	78.9	80.3	-1.4	42.3	56.8	65.8	122.6	53.6
	117	85.4	85.7	-0.3	20.4	50.9	74.0	124.9	59.2
	118	79.9	81.2	-1.2	28.6	58.5	66.7	125.2	53.3
119	88.2	88.7	-0.6	12.3	56.0	71.5	127.6	56.1	

Table A.5 Maxillary mesiodistal tooth angulation measurements in the control group

Case No.	Mesiodistal tooth angulation of maxillary teeth (degrees)						Case No.	Mesiodistal tooth angulation of maxillary teeth (degrees)					
	1	3	4	5	6	7		1	3	4	5	6	7
1	116.5	99.3	93.1	84.0	85.4	80.3	31	107.2	100.9	93.6	88.7	85.7	77.9
2	120.1	102.4	93.8	89.0	82.4	82.3	32	112.8	95.3	87.3	79.8	71.9	67.9
3	120.9	104.6	95.2	87.9	94.7	78.6	33	110.0	100.0	93.4	82.9	81.5	80.4
4	114.9	98.0	87.3	81.2	75.0	76.1	34	109.3	99.5	86.9	81.4	76.0	71.9
5	104.1	89.6	79.8	79.5	80.3	70.5	35	114.9	106.1	92.4	90.5	85.5	80.5
6	103.9	90.4	73.5	70.5	78.6	75.5	36	109.9	103.4	92.0	86.3	77.9	77.6
7	105.8	90.0	85.8	84.8	82.0	87.0	37	105.3	98.4	91.7	81.1	78.1	77.9
8	118.6	101.6	95.7	88.4	83.2	75.9	38	122.8	108.4	102.6	100.7	86.6	92.2
9	115.3	100.6	95.3	86.6	91.6	81.8	39	112.2	103.0	96.8	92.2	86.6	83.5
10	110.6	91.7	88.7	82.4	79.1	75.4	40	116.9	106.6	96.9	86.5	80.9	81.8
11	116.5	102.6	97.3	98.7	92.5	88.8	41	118.3	106.5	96.0	91.0	84.7	89.1
12	118.0	101.3	96.3	93.5	89.8	85.4	42	120.1	112.7	98.3	89.2	86.7	82.5
13	109.3	97.2	88.1	84.0	81.8	82.0	43	125.7	108.7	93.6	92.8	91.2	78.2
14	114.1	102.9	92.4	83.2	86.5	83.9	44	119.4	110.2	95.9	85.7	81.7	81.5
15	116.9	106.5	99.0	89.4	83.9	76.5	45	101.2	89.5	82.0	78.7	78.8	70.3
16	116.5	106.4	88.2	83.0	83.0	80.9	46	103.1	91.6	77.1	74.5	71.2	77.0
17	95.3	86.5	76.0	74.6	70.8	73.7	47	118.3	104.7	94.4	90.4	83.1	88.0
18	111.3	95.1	84.7	79.4	78.7	75.0	48	107.3	93.6	82.2	73.6	77.0	65.1
19	110.4	92.3	83.2	82.9	72.8	70.1	49	117.3	102.1	88.2	82.5	94.6	84.7
20	111.3	102.4	91.9	86.0	93.1	79.6	50	117.6	101.1	90.7	88.9	82.2	77.8
21	121.8	102.3	96.1	94.2	90.5	78.4	51	111.1	93.1	89.3	88.1	84.6	69.9
22	105.6	95.9	86.7	81.1	78.1	79.1	52	121.0	103.3	93.8	88.0	84.2	84.5
23	117.5	97.4	86.8	83.7	83.8	83.5	53	114.5	102.2	90.2	78.6	77.3	77.2
24	121.1	108.4	96.3	85.5	85.3	80.3	54	118.8	105.2	102.2	90.9	77.6	72.9
25	117.7	102.0	88.6	87.0	86.6	77.4	55	122.6	110.4	102.1	94.6	86.3	82.0
26	111.5	99.1	85.7	80.8	79.4	75.4	56	118.0	105.1	96.2	93.2	85.5	71.7
27	114.6	109.2	100.4	87.4	87.4	82.5	57	129.0	114.6	107.1	101.9	93.4	92.2
28	105.3	84.1	78.4	77.1	74.5	72.0	58	119.6	108.1	99.9	96.8	90.0	86.9
29	125.9	104.2	96.5	89.8	85.7	85.0	59	130.6	107.6	103.9	101.5	85.5	90.4
30	110.8	99.7	90.7	73.5	80.6	76.4							

Table A.6 Mandibular mesiodistal tooth angulation measurements in the control group

Case No.	Mesiodistal tooth angulation of mandibular teeth (degrees)						Case No.	Mesiodistal tooth angulation of mandibular teeth (degrees)					
	1	3	4	5	6	7		1	3	4	5	6	7
1	92.6	84.3	76.8	78.3	83.5	93.2	31	99.8	93.6	90.7	90.2	95.9	104.1
2	92.9	92.2	86.4	86.0	84.7	95.4	32	107.1	99.6	92.1	91.6	99.7	108.9
3	99.3	96.3	87.4	89.3	89.1	90.6	33	92.1	83.6	80.2	83.5	82.2	93.6
4	99.9	88.5	78.9	86.2	94.0	95.7	34	97.5	91.6	82.1	78.1	79.5	92.2
5	95.3	89.7	84.4	77.9	81.9	89.6	35	89.3	85.1	77.0	75.4	79.3	85.3
6	99.3	90.8	82.0	87.3	89.1	96.8	36	93.7	88.9	87.1	85.3	83.2	95.4
7	90.3	82.6	73.4	77.4	83.3	91.7	37	96.2	94.2	84.4	86.4	89.6	95.3
8	95.6	91.0	87.7	87.3	90.1	97.5	38	86.7	80.6	81.7	82.3	83.8	87.5
9	92.5	88.5	82.4	82.0	89.4	90.4	39	96.1	92.4	90.0	90.4	84.6	90.5
10	100.9	100.2	90.9	87.6	96.2	99.8	40	89.0	80.5	77.6	79.3	83.9	88.8
11	104.9	92.6	84.0	85.3	86.0	91.0	41	97.9	90.5	82.0	85.8	86.7	103.1
12	105.3	100.6	94.3	95.0	93.7	105.3	42	95.4	95.1	84.0	82.8	88.2	92.4
13	95.3	85.7	83.4	76.9	84.6	89.0	43	99.2	90.0	86.7	83.1	81.0	107.1
14	94.3	87.5	78.5	81.2	83.6	99.3	44	102.7	93.1	90.5	91.5	89.1	97.1
15	103.5	93.3	89.6	87.1	87.9	99.8	45	88.6	82.2	78.6	81.5	81.7	86.9
16	93.0	84.5	82.9	84.8	85.8	89.4	46	88.8	80.5	75.0	75.1	78.6	97.3
17	94.7	86.0	80.0	75.0	77.7	92.1	47	103.0	94.8	89.8	88.5	90.0	98.9
18	97.2	89.7	86.1	81.8	75.3	94.2	48	97.4	93.8	86.4	84.1	85.7	94.0
19	98.7	91.2	85.7	91.0	89.7	95.3	49	94.4	83.7	77.7	80.6	84.9	88.4
20	95.3	91.5	86.6	86.1	82.2	102.8	50	91.7	82.3	74.2	78.6	81.0	91.4
21	99.1	88.8	83.9	79.6	83.4	89.0	51	100.2	89.5	83.9	84.4	80.6	105.5
22	93.5	86.6	79.4	85.4	92.0	102.5	52	93.5	90.1	82.5	81.5	92.2	94.5
23	94.6	83.6	78.3	76.8	81.8	87.8	53	86.7	81.9	72.1	72.2	81.3	85.1
24	98.8	89.1	93.1	87.8	92.1	99.4	54	93.8	83.1	81.8	84.5	86.0	100.1
25	99.8	92.0	88.6	84.5	87.6	99.1	55	100.4	87.9	85.0	81.3	84.3	96.1
26	98.0	94.2	88.7	80.3	86.8	99.7	56	96.6	93.4	89.8	90.3	88.9	98.3
27	97.7	87.8	77.5	76.5	76.1	84.8	57	105.5	99.9	89.6	92.6	87.3	100.7
28	98.5	90.9	88.5	85.0	86.1	90.2	58	108.1	92.6	89.2	86.4	91.1	99.3
29	97.1	91.5	82.6	88.0	88.3	93.0	59	99.0	87.3	80.2	79.5	86.5	91.8
30	97.1	90.1	80.0	80.2	83.0	96.9							

Table A.7 Maxillary mesiodistal tooth angulation measurements in the patients with different skeletal relationships

Skeletal type	Case No.	Mesiodistal tooth angulation of maxillary teeth (degrees)						Case No.	Mesiodistal tooth angulation of maxillary teeth (degrees)					
		1	3	4	5	6	7		1	3	4	5	6	7
I	60	121.5	99.7	96.9	79.4	81.4	91.8	70	115.8	94.0	81.1	72.7	72.3	71.2
	61	120.6	101.7	96.9	91.6	91.0	82.9	71	102.7	85.8	73.7	71.3	72.0	89.4
	62	121.7	100.2	94.8	93.0	86.0	80.5	72	119.8	112.3	97.6	93.9	87.9	82.2
	63	100.3	92.4	86.4	77.6	75.6	76.7	73	115.0	101.7	90.1	85.5	80.9	93.7
	64	114.0	102.5	90.3	82.0	83.4	82.1	74	128.1	107.2	95.7	91.1	86.5	102.2
	65	124.9	119.3	102.7	93.1	90.7	86.1	75	123.7	105.3	87.5	84.4	85.2	82.8
	66	124.7	106.9	95.7	91.3	88.1	82.2	76	119.5	106.2	92.8	84.1	81.8	67.7
	67	124.4	110.9	98.5	86.5	89.9	78.8	77	120.2	111.9	96.1	92.1	93.3	89.1
	68	129.3	109.3	96.0	86.1	83.0	71.3	78	115.6	110.1	96.1	95.2	86.8	84.9
	69	130.8	92.0	89.4	85.8	94.6	81.6	79	119.0	100.1	93.5	88.1	86.0	82.9
II	80	124.6	106.9	95.8	92.5	84.1	74.4	90	107.3	92.8	79.5	73.7	75.0	63.8
	81	126.7	100.4	86.8	83.8	82.0	72.9	91	127.4	106.4	93.5	79.1	73.1	66.4
	82	106.6	95.4	80.2	72.3	76.9	66.5	92	104.3	100.9	84.9	74.3	69.6	62.3
	83	133.5	92.2	81.1	73.3	77.6	72.9	93	113.2	95.5	83.5	73.8	71.3	64.6
	84	117.4	104.2	97.2	89.6	83.0	75.9	94	108.0	92.8	87.9	83.3	79.0	73.8
	85	117.2	105.6	88.8	83.3	86.5	76.0	95	118.0	107.7	91.3	85.1	87.7	76.0
	86	128.5	101.4	87.3	76.1	80.8	71.8	96	120.5	105.4	84.2	81.5	97.1	81.1
	87	105.8	91.3	75.8	76.9	72.1	74.9	97	116.1	101.8	94.9	91.2	81.7	71.3
	88	133.3	99.2	88.4	81.8	84.8	76.1	98	114.6	99.8	88.6	81.6	88.0	83.1
	89	133.4	118.0	101.4	94.7	85.7	78.1	99	89.9	92.0	88.7	82.8	81.8	72.6
III	100	120.9	98.3	85.9	74.7	69.8	55.8	110	119.3	107.7	92.4	91.3	94.8	86.2
	101	124.3	102.8	88.8	84.2	83.3	83.9	111	127.1	113.0	93.6	94.4	90.0	82.9
	102	123.5	102.7	93.9	82.0	85.0	66.7	112	116.0	103.9	94.0	83.1	79.3	64.1
	103	114.2	102.9	93.5	87.3	87.0	73.5	113	134.0	105.8	101.3	101.8	98.1	72.1
	104	135.1	122.4	102.0	93.0	86.1	79.0	114	112.8	99.8	98.6	85.7	87.0	85.1
	105	132.7	107.1	98.2	89.2	91.7	89.4	115	138.2	112.0	105.9	91.6	89.3	86.2
	106	122.9	106.1	94.0	91.6	85.0	69.9	116	117.1	105.1	88.9	74.0	76.8	65.9
	107	126.5	112.2	98.7	87.3	88.4	85.6	117	125.3	111.5	98.6	93.7	91.6	89.9
	108	128.7	120.8	109.6	101.8	94.1	98.6	118	116.2	102.4	85.9	88.1	82.7	80.1
	109	114.3	87.1	77.4	72.9	98.1	77.9	119	134.7	112.9	103.4	94.6	94.6	90.9

Table A.8 Mandibular Mesiodistal tooth angulation measurements in the patients with different skeletal relationships

Skeletal type	Case No.	Mesiodistal tooth angulation of mandibular teeth (degrees)						Case No.	Mesiodistal tooth angulation of mandibular teeth (degrees)					
		1	3	4	5	6	7		1	3	4	5	6	7
I	60	91.3	85.9	82.2	81.7	80.2	73.6	70	98.5	94.3	82.5	78.0	84.9	96.9
	61	93.5	97.6	96.9	98.9	88.0	103.3	71	92.8	86.2	82.8	87.6	87.2	96.3
	62	89.0	88.0	83.9	91.1	94.5	100.4	72	91.5	84.3	83.5	83.1	88.0	89.4
	63	95.9	91.9	90.7	88.3	84.1	93.1	73	94.3	93.1	87.0	87.4	85.7	95.0
	64	88.8	89.2	87.4	83.6	86.2	92.6	74	93.1	85.3	79.2	79.6	77.9	87.2
	65	104.2	104.3	94.0	83.8	87.6	93.4	75	94.1	83.5	78.4	70.7	79.8	90.2
	66	92.4	85.6	81.4	75.4	81.3	91.3	76	92.5	90.7	82.3	79.1	80.7	96.5
	67	100.3	89.3	81.1	77.9	79.1	92.3	77	84.8	77.1	79.7	80.5	84.4	95.5
	68	88.3	85.9	76.9	72.4	73.2	66.7	78	98.6	89.6	79.4	81.4	93.5	109.2
69	92.9	85.3	84.5	80.8	80.5	88.0	79	96.2	92.9	81.4	82.1	87.6	89.5	
II	80	98.5	94.3	82.5	78.0	84.9	96.9	90	98.0	95.2	90.4	83.2	85.7	88.9
	81	92.8	86.2	82.8	87.6	87.2	96.3	91	95.3	94.4	94.7	83.8	82.8	79.0
	82	91.5	84.3	83.5	83.1	88.0	89.4	92	101.4	92.6	84.7	84.6	90.5	97.2
	83	94.3	93.1	87.0	87.4	85.7	95.0	93	103.1	100.7	96.1	95.8	88.3	94.7
	84	93.1	85.3	79.2	79.6	77.9	87.2	94	96.3	73.2	86.9	84.3	83.2	86.2
	85	94.1	83.5	78.4	70.7	79.8	90.2	95	97.8	91.5	80.5	82.4	83.6	111.8
	86	92.5	90.7	82.3	79.1	80.7	96.5	96	105.4	100.3	84.3	87.2	89.0	95.3
	87	84.8	77.1	79.7	80.5	84.4	95.5	97	95.9	87.1	85.1	83.0	90.2	100.2
	88	98.6	89.6	79.4	81.4	93.5	109.2	98	100.7	94.0	83.9	78.8	82.0	98.3
89	96.2	92.9	81.4	82.1	87.6	89.5	99	90.3	80.8	79.9	77.5	93.5	97.8	
III	100	82.3	85.4	80.6	86.1	93.7	99.1	110	90.0	87.8	86.6	75.5	97.1	98.6
	101	83.6	76.5	74.7	72.7	74.8	81.6	111	92.0	86.9	77.6	73.3	76.2	96.5
	102	84.1	77.1	77.5	83.7	89.6	84.8	112	82.7	73.8	70.2	77.5	87.9	92.1
	103	82.1	81.0	80.9	79.8	84.7	82.2	113	87.0	81.8	74.8	73.9	73.5	90.6
	104	88.9	90.3	83.0	78.0	91.8	92.5	114	82.4	77.3	74.5	72.6	74.0	82.5
	105	103.4	91.4	80.4	87.8	82.9	91.3	115	91.1	96.4	90.0	88.9	86.3	102.5
	106	91.3	92.0	80.1	80.0	90.0	87.3	116	87.7	77.7	68.3	74.8	73.3	75.2
	107	88.7	78.9	71.4	69.2	87.2	83.1	117	90.3	89.2	86.0	82.7	86.6	89.2
	108	94.4	85.0	73.9	78.4	87.7	90.6	118	87.2	85.4	79.8	77.2	74.4	85.8
	109	84.7	76.5	70.3	74.9	75.1	70.4	119	94.5	93.6	92.5	89.5	94.4	104.3

APPENDIX B

Data of all variable assessments

Table B.1 Angles formed between the maxillary first and second premolars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	-10.6	-16.0	II	80	-1.7	-5.5	III	100	-9.2	0.5
	61	-1.1	1.2		81	-12.7	-6.0		101	-7.8	3.1
	62	-14.0	-9.4		82	-7.2	-2.0		102	-4.3	2.5
	63	-9.7	-13.9		83	-8.2	-8.7		103	1.4	3.5
	64	-13.0	-2.3		84	-10.0	-8.7		104	-10.4	2.9
	65	-3.2	-3.9		85	-3.9	-1.8		105	-5.4	2.9
	66	-20.0	-8.0		86	1.4	-1.1		106	-10.7	2.9
	67	1.2	13.6		87	-7.2	-7.2		107	-10.3	1.4
	68	-4.8	-2.5		88	-0.9	-5.5		108	1.5	0.1
	69	-8.9	-0.5		89	-4.0	-10.5		109	-6.2	0.1
	70	-9.5	-5.5		90	-3.9	-3.9		110	-9.2	2.7
	71	-15.7	-2.2		91	-0.2	-4.5		111	-11.6	1.3
	72	-0.3	-7.2		92	-4.3	-3.5		112	-1.5	2.0
	73	-5.2	-4.6		93	-2.7	-6.8		113	-8.1	1.1
	74	-9.3	-9.5		94	-11.1	-4.1		114	11.6	1.4
75	-2.1	-2.1	95	-8.2	-9.1	115	-12.2	2.0			
76	-8.3	-5.2	96	-7.4	-7.3	116	-18.0	2.2			
77	-16.6	-11.7	97	-1.5	-4.1	117	-5.2	1.5			
78	1.8	3.2	98	-16.9	-4.9	118	-6.2	2.2			
79	-2.6	-6.2	99	-6.6	-9.0	119	-7.5	2.6			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.2 Angles formed between the maxillary second premolars and first molars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	3.1	2.7	II	80	-0.8	4.3	III	100	-6.7	-4.2
	61	-1.4	-4.5		81	3.5	5.1		101	5.7	-15.6
	62	-5.5	-7.8		82	-0.6	13.6		102	-2.5	3.1
	63	-16.2	6.2		83	-0.9	-1.4		103	2.0	-7.6
	64	-0.2	-3.0		84	16.1	5.6		104	-10.2	1.9
	65	-4.2	-3.8		85	5.5	-2.2		105	-7.7	11.0
	66	15.9	7.1		86	-0.6	2.6		106	-7.6	-1.2
	67	0.7	-3.6		87	-2.6	0.1		107	21.9	11.5
	68	6.3	15.4		88	-3.0	-3.8		108	12.2	-3.1
	69	-2.5	-5.7		89	-6.1	-0.6		109	-8.9	-3.5
	70	0.9	-3.3		90	-1.3	-3.9		110	-7.5	2.4
	71	4.7	-6.6		91	-10.0	-6.5		111	-0.8	-0.3
	72	-3.7	2.9		92	-10.4	1.1		112	3.0	-3.4
	73	8.7	-0.9		93	-8.6	4.7		113	3.7	9.3
	74	0.1	5.3		94	-0.6	-5.0		114	-3.1	-0.9
	75	-1.6	1.6		95	5.2	11.6		115	3.9	3.8
	76	-3.5	-0.2		96	4.5	7.8		116	10.2	4.8
	77	3.7	9.0		97	-2.7	-0.8		117	5.1	-4.2
	78	0.7	-1.1		98	9.9	-4.0		118	-2.9	-0.5
79	-0.4	1.2	99	0.6	3.6	119	-5.1	1.7			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.3 Angles formed between the maxillary first and second molars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	-0.1	-4.2	II	80	-11.9	-8.9	III	100	-11.1	-14.0
	61	-5.9	-12.2		81	0.8	0.3		101	-5.4	-4.6
	62	-13.4	1.3		82	-5.1	-5.8		102	-15.9	-16.0
	63	-4.8	3.4		83	-8.3	-6.5		103	-5.7	-4.3
	64	-4.1	4.0		84	-0.7	3.1		104	-8.0	-10.0
	65	-5.0	-11.2		85	-9.3	-0.4		105	-6.5	-6.5
	66	-0.7	-9.0		86	12.1	-5.2		106	-11.7	5.4
	67	-15.2	-13.8		87	5.0	1.7		107	-10.2	2.7
	68	-2.4	-9.8		88	-5.4	-9.7		108	-15.0	-9.7
	69	3.3	-2.5		89	-3.8	-2.3		109	-10.7	-9.7
	70	-8.3	-6.7		90	-5.1	-8.2		110	-9.4	-16.0
	71	-6.1	-5.8		91	-9.9	-6.9		111	-11.4	-3.9
	72	-8.0	-2.5		92	-6.9	-9.0		112	-6.6	-2.0
	73	-10.2	-2.6		93	-10.0	-9.3		113	-13.2	-9.7
	74	4.3	-4.2		94	0.3	4.3		114	-1.8	-4.1
	75	-7.3	-3.6		95	-8.7	-15.1		115	-5.8	-7.2
	76	-14.8	2.5		96	-0.4	-0.3		116	-4.6	-0.2
	77	-3.5	-6.6		97	-7.4	-5.8		117	4.7	-1.3
	78	-7.8	0.4		98	-7.1	-2.0		118	-8.6	-6.8
79	-3.7	-5.4	99	-5.0	-3.7	119	0.2	3.2			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.4 Angles formed between the mandibular first and second premolars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	4.7	4.8	II	80	-4.5	9.3	III	100	2.6	7.0
	61	-2.2	-7.0		81	-2.1	-5.7		101	-1.6	-3.5
	62	-0.5	7.1		82	13.0	7.0		102	4.3	9.5
	63	8.5	5.1		83	1.9	4.4		103	5.3	4.3
	64	-1.2	6.5		84	2.6	-1.4		104	2.6	-3.2
	65	-4.8	-1.5		85	11.9	7.2		105	17.4	1.3
	66	3.5	10.9		86	1.4	10.5		106	2.6	-0.6
	67	0.6	-3.2		87	6.6	27.3		107	7.8	6.5
	68	6.3	8.5		88	1.4	-4.2		108	-0.4	18.4
	69	4.6	7.6		89	2.5	-9.7		109	4.2	12.4
	70	0.0	-1.2		90	-12.8	-3.0		110	4.7	11.4
	71	-2.8	-1.5		91	-3.9	-1.9		111	-0.5	-1.6
	72	6.7	5.5		92	2.2	-3.1		112	4.1	-4.1
	73	11.7	4.7		93	-2.9	-2.8		113	11.0	9.9
	74	3.3	3.1		94	-7.1	1.0		114	0.6	7.5
	75	2.3	7.2		95	2.8	0.2		115	16.0	8.0
	76	5.8	6.8		96	2.0	-2.7		116	5.4	3.6
	77	6.2	0.8		97	1.0	3.6		117	3.5	8.2
	78	8.3	6.8		98	-8.4	-5.2		118	1.7	4.8
79	-1.4	-1.8	99	8.2	7.3	119	1.9	6.1			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.5 Angles formed between the mandibular second premolars and first molars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	2.5	0.8	II	80	-1.2	-0.9	III	100	16.6	6.1
	61	-0.4	-4.4		81	-2.8	-2.1		101	16.3	7.5
	62	5.6	4.4		82	-3.3	-2.1		102	7.3	-1.9
	63	-4.1	-2.0		83	5.1	-2.2		103	9.4	12.2
	64	11.3	5.0		84	3.6	5.1		104	0.3	2.7
	65	3.0	-1.2		85	0.6	-1.7		105	-8.7	11.7
	66	9.1	4.8		86	-0.6	-3.5		106	2.3	14.1
	67	-1.5	0.3		87	5.2	-5.9		107	10.7	8.3
	68	4.2	5.0		88	5.4	7.5		108	12.5	2.8
	69	6.2	-1.2		89	7.0	16.1		109	5.2	3.0
	70	6.9	1.5		90	-7.3	-13.8		110	7.1	-1.9
	71	7.4	-4.9		91	0.9	3.3		111	3.0	2.9
	72	3.3	1.9		92	-7.5	3.4		112	2.9	5.7
	73	-5.6	6.5		93	0.1	2.0		113	2.6	6.9
	74	8.4	3.1		94	1.3	-3.2		114	7.3	4.2
	75	4.0	6.3		95	3.6	-0.3		115	-8.8	2.1
	76	5.4	-0.9		96	4.9	4.9		116	6.2	6.5
	77	6.0	6.5		97	2.4	1.4		117	2.7	1.8
	78	4.8	9.8		98	-0.2	6.7		118	-0.5	-2.9
79	8.4	-2.9	99	7.7	7.7	119	7.0	11.2			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.6 Angles formed between the mandibular first and second molars of the patients with different skeletal relationships

Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees		Skeletal type	Case No.	Degrees	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	5.7	15.4	II	80	0.8	-2.7	III	100	10.9	10.9
	61	17.6	-2.3		81	4.8	3.4		101	16.8	4.1
	62	4.1	18.7		82	-2.6	3.4		102	12.7	0.0
	63	7.7	14.6		83	5.4	1.4		103	24.9	16.7
	64	19.6	23.3		84	12.5	18.1		104	3.0	2.5
	65	7.0	-0.5		85	3.9	8.0		105	10.7	20.5
	66	18.2	15.9		86	8.9	5.5		106	12.6	29.9
	67	11.8	8.6		87	22.8	6.0		107	22.0	8.3
	68	9.9	6.3		88	-1.0	11.7		108	21.3	9.3
	69	15.1	6.7		89	15.2	18.1		109	16.8	14.8
	70	6.7	9.0		90	0.8	-4.0		110	18.9	4.5
	71	8.2	-3.1		91	11.5	5.6		111	1.6	3.5
	72	14.9	9.5		92	-1.2	10.8		112	9.4	10.6
	73	13.5	7.4		93	8.4	4.6		113	14.7	12.5
	74	19.0	18.7		94	9.7	3.0		114	16.8	17.2
	75	15.5	14.7		95	16.4	14.9		115	9.5	14.5
	76	16.2	-0.5		96	4.2	2.5		116	14.6	13.9
	77	16.6	20.1		97	13.2	12.9		117	5.7	7.7
	78	15.0	20.8		98	10.6	10.0		118	3.1	-0.3
79	19.0	8.3	99	15.3	6.3	119	11.7	17.3			

(+), Divergent tooth angle; (-), Convergent tooth angle.

Table B.7 Interradicular areas between the maxillary first and second premolars of the patients with skeletal relationships

Skeletal I type	Case No.	Area (mm ²)		Skeletal I type	Case No.	Area (mm ²)		Skeletal I type	Case No.	Area (mm ²)	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	34.9	17.4	II	80	36.0	33.1	III	100	22.2	13.9
	61	37.2	42.4		81	19.7	27.1		101	46.0	44.7
	62	24.9	32.5		82	31.3	37.4		102	41.8	33.6
	63	32.9	16.9		83	47.8	38.9		103	35.8	42.6
	64	26.2	24.2		84	23.7	18.7		104	28.4	39.7
	65	15.7	11.5		85	37.1	46.9		105	23.0	43.7
	66	8.6	21.7		86	49.2	32.9		106	25.5	34.4
	67	30.9	19.8		87	22.0	42.5		107	27.9	26.6
	68	26.8	35.0		88	26.3	26.4		108	34.1	4.4
	69	19.8	36.2		89	23.3	24.7		109	14.7	4.5
	70	30.0	39.4		90	29.8	21.8		110	19.1	34.0
	71	24.9	22.1		91	24.6	24.7		111	20.8	32.0
	72	42.5	30.7		92	29.6	19.7		112	38.0	30.0
	73	49.4	34.5		93	50.8	28.7		113	30.6	17.0
	74	21.2	14.1		94	20.4	41.9		114	28.9	26.5
	75	22.7	17.6		95	23.1	27.7		115	19.8	18.3
	76	40.7	49.0		96	41.0	34.6		116	13.5	19.2
	77	18.5	21.8		97	16.6	15.7		117	23.8	16.3
	78	25.5	30.7		98	22.6	23.8		118	29.9	25.9
79	29.5	45.5	99	21.5	9.0	119	33.3	28.9			

Table B.8 Interradicular areas between the maxillary second premolars and first molars of the patients with different skeletal relationships

Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	41.0	47.2	II	80	40.4	49.5	III	100	18.5	22.8
	61	39.9	55.7		81	28.3	37.3		101	38.6	44.9
	62	36.6	32.7		82	45.3	74.0		102	27.8	29.8
	63	56.9	27.6		83	47.6	59.7		103	23.3	32.0
	64	31.5	34.5		84	44.2	40.3		104	18.2	39.6
	65	19.0	40.3		85	31.5	42.6		105	23.5	45.0
	66	44.6	45.0		86	28.7	23.3		106	32.3	44.6
	67	25.0	16.5		87	47.2	51.1		107	77.8	59.3
	68	34.3	46.1		88	45.3	31.8		108	30.5	23.9
	69	36.8	24.3		89	27.3	40.3		109	13.4	18.9
	70	37.8	31.5		90	40.1	20.7		110	18.9	29.1
	71	29.7	22.3		91	18.3	10.8		111	39.6	48.8
	72	21.8	34.9		92	42.1	33.0		112	38.3	24.0
	73	43.2	56.5		93	38.2	46.8		113	32.1	39.7
	74	29.7	33.2		94	31.9	28.6		114	16.5	40.2
	75	15.7	23.6		95	41.6	49.5		115	35.8	33.9
	76	33.0	43.1		96	39.6	50.2		116	43.2	34.4
	77	36.0	34.0		97	21.4	16.1		117	48.0	29.8
	78	21.2	16.6		98	63.5	24.7		118	22.4	25.7
79	36.2	33.0	99	52.7	41.9	119	25.9	42.2			

Table B.9 Interradicular areas between the maxillary first and second molars of the patients with different skeletal relationships

Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)	
		Rt side	type			type	Lt side			Rt side	Lt side
I	60	28.4	31.6	II	80	20.6	13.8	III	100	14.5	12.7
	61	18.4	18.3		81	22.5	19.1		101	13.7	17.2
	62	8.8	32.7		82	19.8	24.5		102	14.8	13.4
	63	25.6	20.1		83	14.8	14.7		103	16.3	15.0
	64	17.8	24.8		84	18.5	27.8		104	16.9	15.6
	65	13.7	8.5		85	15.7	23.7		105	17.8	24.6
	66	18.9	18.7		86	28.4	14.8		106	18.1	23.8
	67	6.9	7.2		87	27.8	25.9		107	15.8	25.7
	68	17.8	11.5		88	16.8	11.6		108	12.3	15.9
	69	17.7	17.3		89	16.9	20.9		109	15.6	14.7
	70	15.7	15.5		90	17.4	12.4		110	12.9	15.3
	71	18.2	20.7		91	24.6	14.5		111	13.4	20.3
	72	12.3	17.6		92	22.9	17.0		112	9.3	14.0
	73	10.2	19.2		93	15.8	20.5		113	15.7	18.9
	74	28.9	15.8		94	21.2	15.4		114	23.0	14.5
75	12.6	16.9	95	16.3	15.6	115	18.7	16.3			
76	14.3	29.8	96	32.7	26.7	116	11.1	14.8			
77	16.7	20.3	97	20.8	17.8	117	16.9	20.7			
78	14.0	24.5	98	15.7	14.4	118	12.3	11.7			
79	21.3	19.7	99	14.5	13.4	119	15.0	19.3			

Table B.10 Interradicular areas between the mandibular first and second premolars of the patients with different skeletal relationships

Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	71.6	56.3	II	80	45.4	76.2	III	100	53.6	87.0
	61	30.4	95.8		81	31.9	29.0		101	45.8	60.3
	62	49.3	85.4		82	42.2	83.3		102	64.6	74.5
	63	67.2	65.7		83	48.4	52.1		103	69.7	69.8
	64	45.6	71.2		84	40.4	37.1		104	53.6	55.6
	65	28.3	23.7		85	65.4	84.1		105	105.0	59.8
	66	52.2	67.3		86	49.2	42.6		106	68.3	47.1
	67	19.6	49.7		87	53.8	75.4		107	74.7	59.2
	68	56.1	57.3		88	52.4	37.5		108	32.8	69.6
	69	37.8	53.0		89	34.0	32.0		109	53.3	57.4
	70	50.8	46.8		90	10.1	21.3		110	58.8	68.9
	71	37.4	57.8		91	32.1	34.5		111	38.8	54.4
	72	60.4	61.2		92	19.6	34.9		112	51.3	41.9
	73	54.5	57.7		93	19.9	55.9		113	69.9	67.9
	74	53.3	34.3		94	36.0	61.1		114	49.3	41.5
	75	42.4	46.2		95	60.1	46.0		115	49.1	47.5
	76	64.3	73.8		96	74.4	50.7		116	49.3	46.9
	77	56.5	50.4		97	46.4	42.9		117	56.4	60.8
	78	54.5	38.6		98	25.9	29.8		118	54.9	45.8
79	50.9	52.3	99	62.3	47.3	119	52.0	49.2			

Table B.11 Interradicular areas between the mandibular second premolars and first molars of the patients with different skeletal relationships

Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	46.1	55.2	II	80	30.9	36.4	III	100	67.7	50.7
	61	60.6	24.1		81	28.3	29.3		101	73.5	59.5
	62	53.3	47.9		82	31.4	29.3		102	61.7	33.7
	63	29.1	41.2		83	45.4	40.4		103	65.3	44.1
	64	63.9	67.3		84	33.2	30.8		104	38.6	45.8
	65	29.2	29.4		85	45.3	44.6		105	19.3	79.3
	66	27.4	36.3		86	28.7	26.9		106	52.3	67.6
	67	33.6	31.2		87	57.1	25.7		107	46.5	40.8
	68	35.0	39.9		88	35.4	55.1		108	51.4	25.7
	69	40.1	40.8		89	38.0	50.7		109	35.2	37.7
	70	54.2	37.7		90	19.9	9.6		110	57.0	28.2
	71	31.9	26.5		91	37.9	28.0		111	29.6	27.2
	72	48.1	35.1		92	26.1	35.8		112	40.8	38.3
	73	34.7	36.0		93	50.9	70.1		113	32.4	47.1
74	56.5	15.8	94	55.6	38.5	114	43.3	49.3			
75	47.9	44.0	95	39.4	34.1	115	14.2	25.7			
76	66.9	44.5	96	37.6	33.9	116	38.2	38.4			
77	39.0	44.8	97	35.8	31.8	117	44.1	50.8			
78	37.5	45.5	98	15.1	22.1	118	44.8	36.6			
79	56.5	41.4	99	61.5	59.1	119	49.3	46.3			

Table B.12 Interradicular areas between the mandibular first and second molars of the patients with different skeletal relationships

Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)		Skeletal type	Case No.	Area (mm ²)	
		Rt side	Lt side			Rt side	Lt side			Rt side	Lt side
I	60	32.6	35.0	II	80	38.3	45.6	III	100	36.1	16.5
	61	48.1	78.6		81	28.3	37.9		101	44.4	46.4
	62	90.3	84.7		82	40.6	37.9		102	25.2	29.7
	63	45.4	54.7		83	54.2	49.1		103	55.1	60.3
	64	41.6	34.0		84	43.5	54.3		104	20.4	19.8
	65	30.1	31.9		85	71.3	58.0		105	37.1	47.0
	66	36.4	33.9		86	48.8	41.6		106	51.0	38.8
	67	29.8	21.8		87	24.2	35.6		107	51.1	32.0
	68	32.5	31.6		88	39.4	46.0		108	40.8	37.4
	69	39.2	48.8		89	26.5	33.6		109	39.5	49.4
	70	52.8	52.9		90	21.2	14.1		110	20.8	27.1
	71	23.2	31.8		91	43.2	38.8		111	29.9	39.8
	72	28.8	27.1		92	44.0	33.5		112	43.4	49.0
	73	37.1	38.1		93	55.5	63.0		113	46.7	37.1
74	40.4	39.3	94	48.0	72.9	114	41.5	50.6			
75	24.6	34.9	95	57.2	74.5	115	21.9	26.4			
76	32.3	24.5	96	66.1	84.2	116	30.1	33.9			
77	45.4	43.3	97	29.0	31.9	117	47.5	48.2			
78	23.2	21.0	98	85.8	49.4	118	36.9	34.1			
79	40.4	41.0	99	33.7	33.9	119	24.0	36.0			

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