



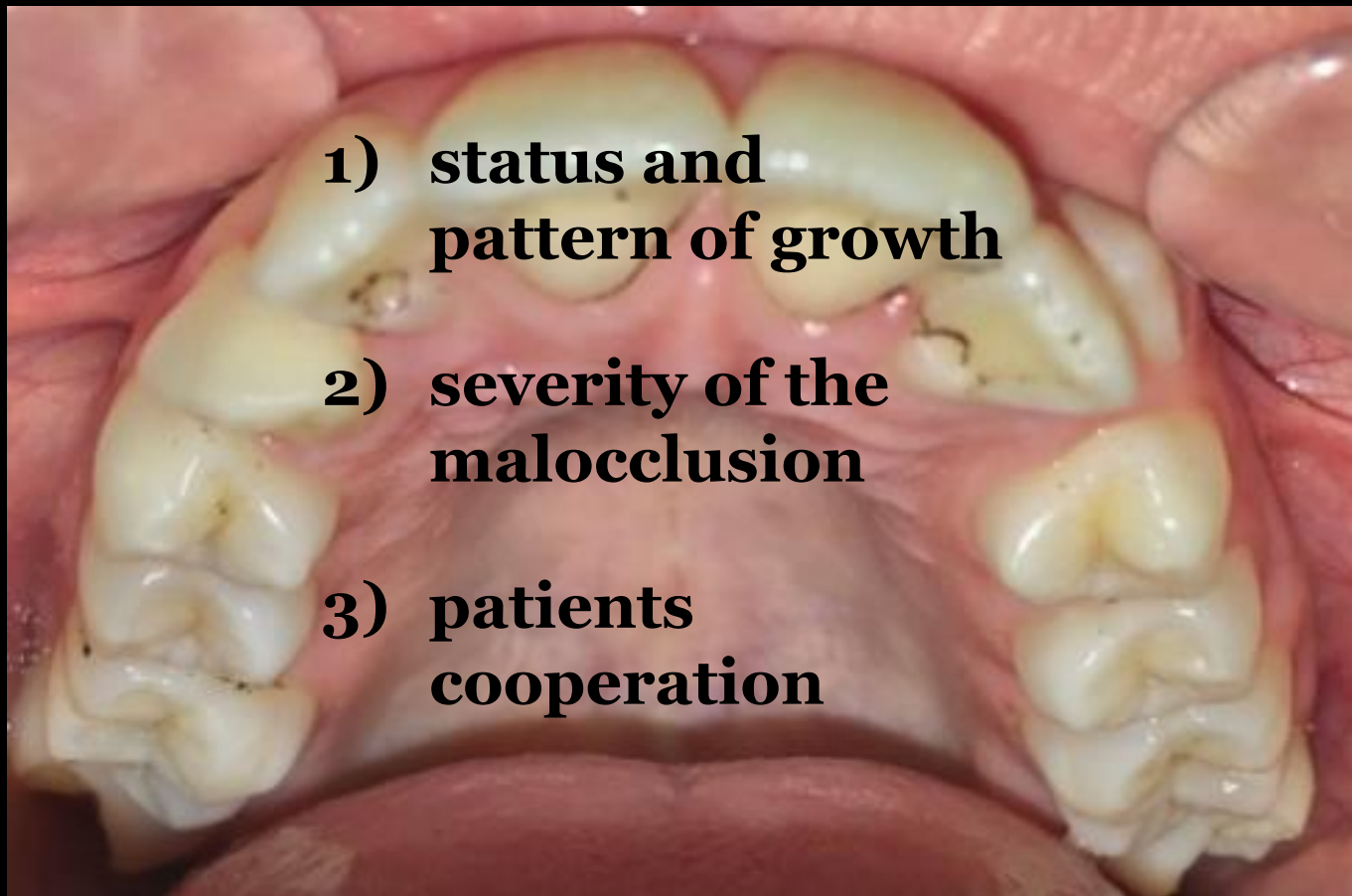
TREATMENT PLANNING FOR EFFECTIVE AND EFFICIENT CORRECTION OF CLASS II MALOCCLUSION

Asst. Prof. D-r Vesna Trpevska

PHO University Dental Clinical Center „St. Panteleimon“, Department of Orthodontics, Skopje,
Republic of North Macedonia,

Faculty of Medical Sciences, Goce Delcev University, Stip, Republic of North Macedonia , Faculty
of Medical Sciences, Goce Delcev University, Stip, North Macedonia

TREATMENT APPROACH OF CLASS II MALOCCLUSION..



We must make fundamental treatment planning decisions that are based on the patient's long term benefit.

Esthetics

Health and stability

Treat in harmony with growth

DIMENSIONS OF THE DENTURE (anterior, posterior and lateral limit)

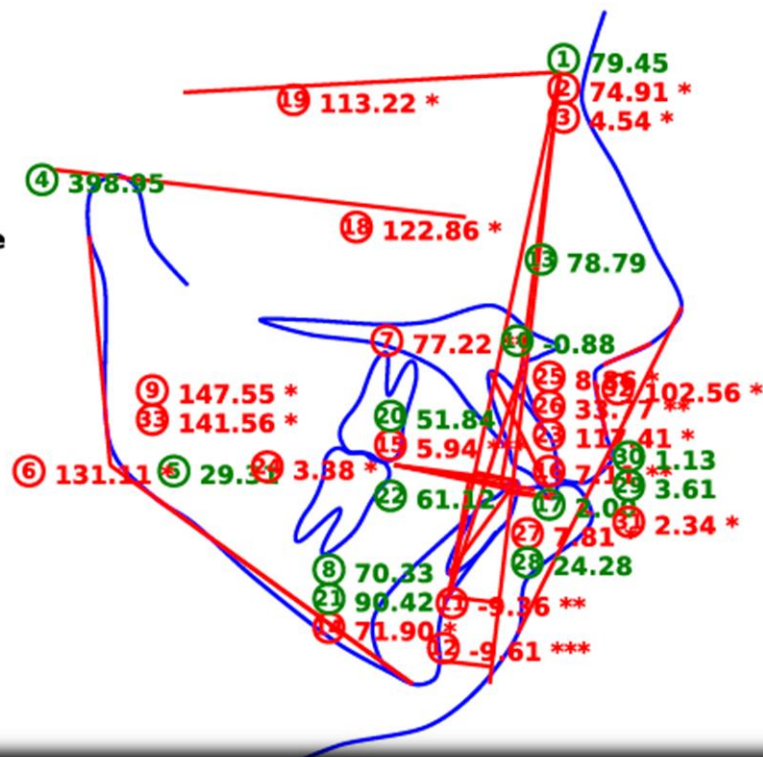
Height

Width

Length



- ① SNA
- ② SNB
- ③ ANB
- ④ Bjork sum
- ⑤ FMA
- ⑥ Gonial angle
- ⑦ APDI
- ⑧ ODI
- ⑨ Combination factor
- ⑩ A to N-Perp(FH)
- ⑪ B to N-Perp(FH)
- ⑫ Pog to N-Perp(FH)
- ⑬ FH to AB
- ⑭ A-B to mandibular plane
- ⑮ Wits appraisal
- ⑯ Overjet
- ⑰ Overbite
- ⑱ U1 to FH
- ⑲ U1 to SN
- ⑳ U1 to UOP
- ㉑ IMPA
- ㉒ L1 to LOP
- ㉓ Interincisal angle
- ㉔ Cant of occlusal plane
- ㉕ U1 to NA(mm)
- ㉖ U1 to NA(deg)
- ㉗ L1 to NB(mm)
- ㉘ L1 to NB(deg)
- ㉙ Upper incisal display
- ㉚ Upper lip to E-plane
- ㉛ Lower lip to E-plane
- ㉜ Nasolabial angle
- ㉝ Extraction Index



WebCeph Analysis

Measurement	Mean	S.D.	Result	Severity	Polygonal chart	Meaning
SNA	81.08	3.7	79.45		70 75 80 85 90	Normal A-P position of maxilla
SNB	79.17	3.8	74.91	*	70 75 80 85 90	Retruded mandible
ANB	2.46	1.8	4.54	*	-10 -5 0 5 10 15	Skeletal Class II
Bjork sum	397.16	3.6	398.95		390 395 400 405	Normodivergent Skeletal Pattern
FMA	29.63	3.0	29.31		20 25 30 35 40	Normodivergent facial pattern
Gonial angle	124.31	5.4	131.11	*	115 120 125 130	Obtuse gonial angle
APDI	85.74	4.0	77.22	**	75 80 85 90 95	Skeletal Class II
ODI	72.15	5.5	70.33		65 70 75 80	Normal ODI
Combination factor	157.9	6.5	147.55	*	150 155 160 165	Small combination factor value
A to N-Perp(FH)	0.4	2.3	-0.88		-10 -5 0 5 10	Normal A-P position of maxilla
B to N-Perp(FH)	-3.5	2.0	-9.36	**	-15 -10 -5 0 5	Retruded mandible
Pog to N-Perp(FH)	-1.8	2.5	-9.61	***	-10 -5 0 5 10	Retruded chin point
FH to AB	81	3.0	78.79		70 75 80 85 90	Skeletal Class I
A-B to mandibular plane	69.3	2.5	71.90	*	60 65 70 75 80	Large AB to mand. plane angle
Wits appraisal	-2.74	0.3	5.94	***	-15 -10 -5 0 5 10	Skeletal Class II

Overjet	2	2.0	7.11	**	-10 -5 0 5 10 15	Large overjet
Overbite	2	2.0	2.00		-10 -5 0 5 10 15	Normal overbite
U1 to FH	113.8	6.4	122.86	*	105 110 115 120	Proclined upper incisor
U1 to SN	105.28	6.6	113.22	*	100 105 110	Proclined upper incisor
U1 to UOP	55	4.0	51.84		45 50 55 60 65	Normal upper incisor
IMPA	91.62	3.2	90.42		80 85 90 95 100	Normal lower incisor inclination
L1 to LOP	66	5.0	61.12		60 65 70 75	Normal lower incisor
Interincisal angle	128	5.3	117.41	*	120 125 130 135	Proclined interincisor angle
Cant of occlusal plane	9.3	3.8	3.38	*	0 5 10 15 20	Flat occlusal plane angle
U1 to NA(mm)	4	3.0	8.86	*	-5 0 5 10 15	Protruded upper incisor
U1 to NA(deg)	22	5.0	33.77	**	15 20 25 30	Proclined upper incisor
L1 to NB(mm)	4	2.0	7.81	*	-5 0 5 10 15	Protruded lower incisor
L1 to NB(deg)	25	5.0	24.28		15 20 25 30 35	Normal lower incisor inclination
Upper incisal display	2.5	1.5	3.61		-10 -5 0 5 10 15	Normal incisal display
Upper lip to E-plane	0	2.0	1.13		-10 -5 0 5 10	Normal upper lip position
Lower lip to E-plane	0	2.0	2.34	*	-10 -5 0 5 10	Protruded lower lip
Nasolabial angle	95	5.0	102.56	*	85 90 95 100 105	Retruded lip
Extraction Index	153.8	7.8	141.56	*	145 150 155 160 165	Extraction considered

WebCeph Treatment Plan

Name: Sribinowska, Iskra
Gender: Female
Age: 21 years, 10 months
Treatment: Iskra Sribinowska

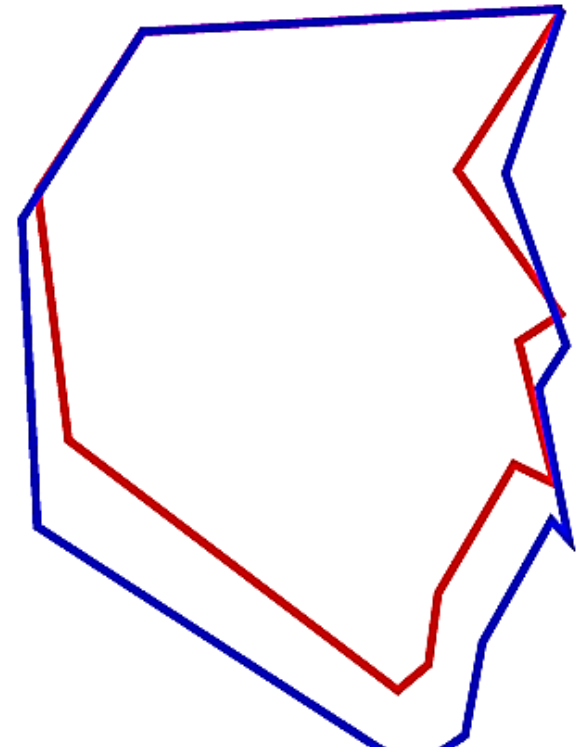


TREATMENT PLAN

- Upper first premolars extraction
- Alternative(camouflage) treatment plan

● Normal

● Patient



	Group/Measurement	Value	Norm	SD Dev	DevNorm	
CRANIAL BASE	Saddle/Sella Angle (SN-Ar) (°)	129.1	124.0	5.0	1.0	*
	Articular Angle (°)	159.4	158.5	8.0	0.2	
	Genial/Jaw Angle (Ar-Go-Mc) (°)	115.9	121.0	6.7	-0.8	
	Sum Total: N-S-Art + S-Ar-Go + Ar-Go-Mc (°)	394.4	398.0	4.0	-2.9	**
	Anterior Cranial Base (SN) (mm)	72.0	77.1	3.0	-1.7	*
	Posterior Cranial Base (S-Ar) (mm)	59.0	58.8	4.0	0.6	
	Nasion-Genion Length (mm)	118.5	133.7	4.0	-4.3	****
	Y-Axis Length (mm)	117.0	159.0	6.0	-5.7	***
A - P RELATIONSHIP	SNA (°)	83.5	82.0	3.5	0.4	
	SNS (°)	79.2	80.9	3.4	-0.5	
	ANS (°)	4.5	1.6	1.5	1.6	*
	Sella Angle (°)	15.5	51.0	4.0	-3.9	***
	Wits Appraisal (mm)	4.5	-1.0	1.0	3.5	*****
	Convexity (NA-APo) (°)	5.5	2.8	3.0	0.9	
CRANIAL BASE / MANDIBLE	Anterior Face Height (NaMc) (mm)	102.5	137.8	5.0	-7.1	*****
	Posterior Face Height (SoCo) (mm)	70.8	89.2	5.0	-5.7	***
	P-A Face Height (S-Co/N-Mc) (%)	69.2	65.0	4.0	1.0	*
	Lower Face Height (ANS-Xi-Pm)(°)	26.2	45.0	4.0	-4.2	****
	Facial Plane to SN (SN-NPog) (°)	51.1	51.8	4.0	-0.2	
	Y-Axis (SoN-SN) (°)	51.4	57.0	5.5	-1.0	*



DENTAL	Intraoral Angle (U1-L1) (°)	109.9	150.0	6.0	-3.5	***
SOFT TISSUE	Lower Lip to S-Plane (mm)	-3.6	-2.0	2.0	-0.8	
	Upper Lip to S-Plane (mm)	-1.6	-7.8	2.0	5.1	***
	Z Angle (°)	74.8	75.0	4.0	-0.0	
	FMA (MP-PH) (°)	17.7	25.0	4.5	-1.2	*
	PPH/APH (%)	69.2	64.5	N/A	N/A	
	Chin Thickness (Pg-Pg') (mm)	14.5	14.2	3.5	0.1	
	Lower Lip Thickness @ Sp1 (S-S') (mm)	11.1	N/A	N/A	N/A	
	U-Lip Thickness @ A Point (mm)	19.5	17.0	3.0	0.8	
	Lower Lip Thickness (mm)		1.0	1.0		
	Chin Thickness (Pg-Pg') (mm)		15.9	3.5		

TREATMENT PLAN

**Alternative
(camouflage)**

**Upper
premolars
extraction**

**9 mm
canine
retraction**

CONCLUSION

The decision which orthodontic mechanics must be performed should be decided by the orthodontist after a good treatment planning since that there is no doubt of the patient collaboration necessity.

As each case distinguishes from one another because of growth variability orthodontist just cannot generalized the appliance therapy.

It is very important to select the cases carefully because application of knowledge and skills and good cooperation ensures long term stable results.