Case Report Presentation Information

Charles H. Tweed
International
Foundation

CASE REPORT PRESENTATION INFORMATION

I. "Fellows" of the Foundation are to present three patient records at teach biennial meeting. (A fellow is a member who has successfully presented clinical material to the examination committee at a biennial meeting).

II. Regular members who are applying for Fellowship status are to present three patient records. Two of the three records must be four premolar extraction cases.

The Board of Directors of the Charles H. Tweed Foundation suggests that the following categories of malocclusion correction be presented to the Examining Committee to fulfill the clinical requirements for Fellowship in the Charles H. Tweed International Foundation for Orthodontic Research. Treatment of the patients whose records are presented must have been completed within the previous two years and must satisfy the treatment objectives of the Charles H. Tweed International Foundation.

The categories of malocclusion are:
1. An Angle's Class II malocclusion treated without premolar extraction.
2. An Angle's Class II malocclusion treated with the extraction of maxillary first premolars and mandibular second premolars.
3. An Angle's Class II malocclusion treated with the extraction of maxillary and mandibular first premolars.
4. A patient whose diagnosis and treatment requires the correction of a large bimaxillary protrusion.
5. The non-surgical correction of a Class III malocclusion can be substituted for either category 2 or category 3.

III. Case Report Presentation Instructions
Prepare the patient records according to the instructions which are included.

Copy the Differential Diagnosis and Clinical Analysis form an appropriate number of times so that one complete form is included with each case report.

INSTRUCTIONS FOR CASE REPORT PRESENTATION

I. **DENTAL CASTS**
 A. Pretreatment and posttreatment casts of each patient are required. Pretreatment casts may be digital but plaster is preferred. Posttreatment casts must be plaster. Casts are to be made from excellent impressions. Casts must be white, clean and trimmed in the following manner.
  (1) The art portion of the cast should be approximately 1/3 the height of the anatomical portion.

(2) The buccal cuts (right and left) of the maxillary casts are made at an angle of 65° degrees to the base cut; the anterior or incisal cuts are made at a 25° degree angle to the base cut.

(3) The buccal cuts (right and left) of the mandibular casts should be made at 55° degrees to the base cut. The anterior curvature should extend from canine to canine.

(4) Heels: Use the following steps:
a. Occlude the casts so the maxillary and mandibular heels are trimmed together.
b. Trim the heels at a 45° angle to the base cut.

(5) Digital introral scans, if done instead of casts, must be printed in a one to one format on high quality paper.

II. **CEPHALOMETRIC RADIOGRAPHS AND TRACINGS** (must be loose for immediate access)

A. Pretreatment and posttreatment cephalometric x-rays that face right are required. It is recommended, when possible, that progress cephalometric films be included. Pretreatment x-rays are traced in white or black; progress in blue; posttreatment in red; recovery in green. A tracing is made of each x-ray to record the following:

(1) Frankfort plane: Connect a point 4.5 mm above the geometric center of the ear rod with an orbital point located midway between the left and right lower borders of the orbits.

(2) Mandibular plane: Anteriorly, this plane touches menton, and posterioriily it bisects the distance between the right and left lower borders of the mandible in the region of the gonial angle.

(3) Mandibular incisor to mandibular plane: Extend a line drawn along the long axis of the mandibular central incisor downward to mandibular plane and upward to the Frankfort plane

(4) Measure the FMIA, FMA, and IMPA.

(5) SN plane: Connect Sella to Nasion. Measure the SNA, SNB, and ANB angles.

(6) Measure the AO-BO.

(7) Occlusal plane: Bisect the anterior overjet and mesial cusp of the first molars. Measure the angulation that the occlusal plane makes with the Frankfort horizontal plane.

(8) Z-Angle: The profile line is drawn from the soft tissue chin tangent to the outline of the most prominent lip. Measure the Z angle which is formed by the intersection of Frankfort horizontal and the profile line.

(9) Measure upper lip and total chin.

(10) Draw and measure posterior facial height (a line from articulare to the mandibular plane along the ascending ramus).

(11) Draw and measure anterior facial height (a perpendicular from mention to palatal plane).

(12) Calculate the Facial Height index (PFH/AFH).

B.   The x-rays and tracings are to be placed in transparent folders. The tracings are to bear dates and a record of the angles and measurements described above. Measurements are to be neatly recorded in the lower left corner of the tracing. Example: FMIA: 68°, FMA: 25°, IMPA: 87°, ANB: 1°, O.P.: 10°, AO-BO: 4mm, Z.A.: 78°, UL: 15mm, TC: 15mm, PFH: 50mm, AFH: 65mm, FHI: .76

III.   **INTRAORAL RADIOGRAPHS** (must be loose for immediate access)
Pretreatment and posttreatment full mouth panoramic radiographs are required.

IV.   **FACIAL PHOTOGRAPHS** (must be loose for immediate access)
A.   Pretreatment and posttreatment front and profile photographs are required. Smiling photographs are recommended.
B.   Facial photographs should be black and white, or color, with the profile facing right.
C.   Photographs should be mounted so that pretreatment photos can be easily compared to posttreatment photos.

V.   <u>**Remember: All records must be loose for immediate access.**</u>

Example: Cephalometric Tracing

OCCLUSAL PLANE MEASUREMENT
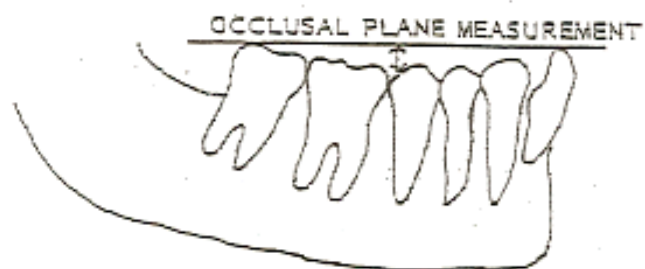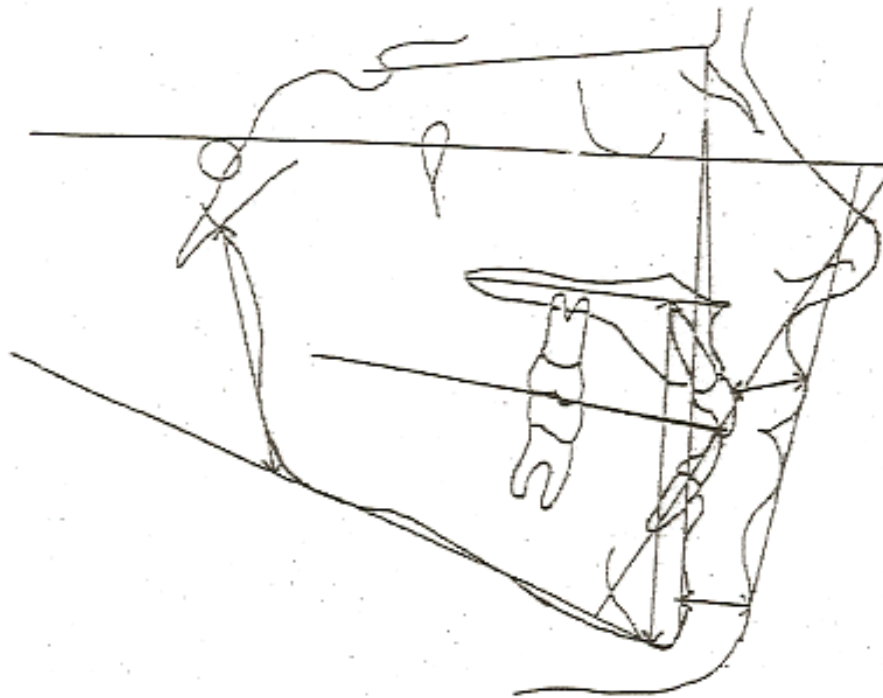
DIFFERENTIAL DIAGNOSIS AND CLINICAL ANALYSIS

PATIENT'S FIRST NAME _____ INI ____ LAST NAME _____ CASE # _____

BEGIN TX. AGE _____ SEX ___ BIRTHDAY __/__/__ DENTIST _____ REFERRED BY _____

DATE		__/__/__	__/__/__	__/__/__	__/__/__
	NORMAL	PRE-TX	PROGRESS	FINAL	POST-TX
FMIA	67				
FMA	25				
IMPA	88				
SNA	82				
SNB	80				
ANB	2				
AO-BO	0	mm	mm	mm	mm
OCC PLANE	10				
Z ANGLE	75				
UPPER LIP		mm	mm	mm	mm
TOTAL CHIN		mm	mm	mm	mm
POST.FACIAL HT.	45mm	mm	mm	mm	mm
ANT.FACIAL HT.	65mm	mm	mm	mm	mm
FAC.HT. INDEX	0.70				
FAC.HT. CHANGE		xxxxxxx	/	/	/
MAND. CUSPID WIDTH		mm	mm	mm	mm
MAND. MOLAR WIDTH		mm	mm	mm	mm

READOUTS

```
              7   6  5  5   6   7
Initial    U _____||_____
           L
              7   6  5  5   6   7
Level      U _____||_____
           L
              7   6  5  5   6   7
Anch Prep  U _____||_____
           L
              7   6  5  5   6   7
Finish     U _____||_____
           L
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DIAGNOSIS:

A. Skeletal

B. Dental

C. Perio

D. Facial

E. Habits _____
1. Thumb Sucker
2. Tongue Thrust
3. Bruxism

F. Joint Health

CRANIAL FACIAL ANALYSIS

Normal Range	Ceph. Value	Difficulty Factor	Difficulty
FMA 22-28	_____	___5___	_____
ANB 1-5	_____	___15___	_____
Z-ANGLE 70-80	_____	___2___	_____
OCC.PLANE 8-12	_____	___3___	_____
SNB 78-82	_____	___5___	_____
PFH/AFH 0.65-0.75	_____	___3___	_____

C.F. Difficulty Total

TREATMENT PLANNING, TIMING
EXTRACTIONS:
  MAXILLARY:
    RIGHT _____ LEFT _____
  MANDIBULAR:
    RIGHT _____ LEFT _____
(Please Indicate Missing Teeth)

TOTAL SPACE ANALYSIS

		Difficulty Factor	Difficulty
Anterior			
Tooth Arch Disc.	_____	__1.5__	_____
Headfilm Disc.	_____	__1.0__	_____
Total	_____		_____
Mid Arch			
Tooth Arch Disc.	_____	__1.0__	_____
Curve of Spee	_____	__1.0__	_____
Total	_____		_____
Horizontal Occlusal Disharmony (Class II or Class III)	_____	__2.0__	_____
Posterior			
Tooth Arch Disc.	_____		
(-)expected Increase	_____		
Total	_____	__0.5__	_____

Space Analysis Total _____

Space Analysis Difficulty Total _____

C.F. Difficulty Total _____

Space Analysis Difficulty Total _____

Total Difficulty _____

DIFFICULTY INDEX:
Mild   0 - 60
Moderate   60 – 120
Severe   over 120