

The Orthodontic Examination



Dr. Ayshan KOLEMEN

- ▣ Orthodontic diagnosis requires extensive and detailed examination to assessments of the state of the patient.
- ▣ Accurate diagnosis is the key to the correct treatment

- ▣ Data needed to Orthodontic diagnostic be into three main grouped :
 1. Information received from patients
 2. The information obtained from clinical examination
 3. Examination of diagnostic recordings (dental models, radiographs, photographs)

1. Information received from patients:(What is a main complaint?)
 - ▣ Taken the medical and dental history
 - ▣ Status of the physical growth
 - ▣ Evaluation of the patient motivation, expectations, social status and behavior.

Ishik University- College of Dentistry
Department of Orthodontic
Information form healthy adult nurse

Date:/...../2010 the name of the physician.....

The patient:

Name and surname : Date of birth :/...../.....

Age (year and month):..... year, month

Address :

Tel: House:..... Mobile 1:.....

Mobile 2:.....

Health history of the patient:

Answer the following questions Bello a circle around the appropriate answer.

1) Is your health the public good? Yes, no, I do not know

2) Do you doubt of anything? Yes, no, I do not know
if your answer is Yes, Please Explain

3) Is it before you enter the hospital, do you have received general anesthesia or ~~anesthesia~~ you enter? Yes, no, I do not know

4) Do you have an allergy to any substance? Yes, no, I do not know
If your answer is Yes, Please Explain

5) Are any reason ~~Tajir~~? Yes, no, I do not know

6) Do you ~~Tajir~~ communicable from one of these, Please mark x in front of your patient:

Problems at birth <input type="radio"/>	cancer <input type="radio"/>	heart problems <input type="radio"/>
Epilepsy <input type="radio"/>	rheumatic <input type="radio"/>	fever, asthma <input type="radio"/>
anemia <input type="radio"/>	cleft lip and palate <input type="radio"/>	bleeding hemophils <input type="radio"/>
problems in speech and hearing <input type="radio"/>	blood transfusions <input type="radio"/>	vision problems <input type="radio"/>
Hepatitis <input type="radio"/>	problems in the skin <input type="radio"/>	AIDS or HIV <input type="radio"/>
sleep problems <input type="radio"/>	liver disease <input type="radio"/>	behavior problems <input type="radio"/>
kidney disease radiotherapy <input type="radio"/>		Diabetes <input type="radio"/>
growth problems Arthritis <input type="radio"/>		Attention Deficit <input type="radio"/>

History of health of the mouth patient:

1) What is that thing in your teeth that disturbs you ?

2) do not you picked for your teeth? Yes, no, I do not know
If your answer is yes, remember the last date for the film?

3) Is there a problem after you treat your teeth? Yes, no, I do not know
If your answer is Yes, Please Explain ?

- 4) Did you decay and / or pain in your teeth? Yes, no, I do not know
- 5) Are your teeth sensitive to heat or to eat? Yes, no, I do not know
- 6) Are your teeth after relieve bleeding gums? Yes, no, I do not know
- 7) Do you use tooth brush or gargling contains fluoride? Yes, no, I do not know
- 8) Is there a sound or pain in the jaw joint? Yes, no, I do not know
- 9) Is there a problem when you open your mouth and shut up? Yes, no, I do not know
- 10) Which indeed is where the parents of the teeth and face? Yes, no, I do not know
If your answer is Yes, Please Explain?

- 11) Has there been an accident of your teeth? Yes, no, I do not know
- 12) Do you sorcery in the jaw or face? Yes, no, I do not know
- 13) Do you have one of these habits?
 sucking the cheeks mouth breathing
 eat nails grinding teeth
 pressure teeth

14) We need to know any other problem faced teeth?

Do you have any suggestions for treatment?

.....

.....

.....

.....

.....

Name and surname, which fill out the form;
Signature:|

CLINICAL EXAMINATION FORM

Date:...../...../201...

Doctor Name:.....

Patient Name, Surname:.....

The main questions:

1) The based complain of the patient:

- a. Anterior crowding:.....
- b. Crowding:.....
- c. Overjet:.....
- d. Overbite:.....
- e. Aesthetic:.....
- f. TMJ problems:.....

2) Evaluation of the functional matrix:

a. Nasopharyngeal airway:

- Tonsils (available, been taken, hypertrophic)
- Adenoids (available, been taken, hypertrophic)
- Outcome of the nose (Edema/Bleeding)
- Breathing (Nose/ Mouth).....

If you have respiratory problems:

- ENT consultation (Yes/No).....
- Advanced diagnostic (Yes/No).....

b. Habits:

- Tongue thrust (Yes/No).....
- Tongue thrust (Anterior/ Lateral).....
- Finger sucking (Yes/No).....
- Lip sucking (Yes/No).....
- Oral breather (Yes/No).....
- Mental muscle tension (Yes/No).....
- Peri-oral lip tension (Yes/No).....
- Other habits.....

Does the habit creates a problem? (Yes/No).....

If yes:

- Myotherapy (Yes/No).....
- Other diagnostic evaluation (Yes/No).....

c. Muscle structure

- Perioral function (Firm/ Normal/Relax).....
- Perioral compatible (Firm/ Normal/Relax).....
- Sublabial furrow (Yes/No).....
- Sublabial furrow (High/ Medium/Low).....
- Masticatory muscles (Strong/Normal/weak)....
- Buccal muscles (Strong/Normal/weak).....

3) Orthodontic dental evaluation

a. Dentition evaluation:

- Right molar relationship Class:(1) (2) (3)
- Left molar relationship Class:(1) (2) (3)
- Right canine relationship Class:(1) (2) (3)
- Left canine relationship Class:(1) (2) (3)
- Overjet (mm).....
- Overbite (mm).....
- Open bite (mm).....

b. Functional evaluation

- Transverse/Sagittal/ Both.....
- "V" shape maxilla (Yes/No).....
- Upper incisors locks the lower incisors (Yes/No).....
- Upper incisors in buccal or lingual version (Buccal/ Lingual).....
- Cross Bite (Yes/No).....
- Cross Bite (Right/ Left/ Bilateral/ Anterior)
- Mandible functional dislocation (No/ Right/ Left).....

c. Facial aesthetic dentition evaluation

- Face midline- maxillary dentition midline (Compatible/ Right/ Left).....
- Face midline- mandibular dentition midline (Compatible/ Right/ Left).....
- Maxillary midline – mandibular midline (Compatible/ Right/ Left).....
- Lip line (Rest position mm).....
- Smile line (mm).....
- Appearing gingiva (Rest position mm)...
- Appearing gingiva (Wide Smile mm).....

4) Facial asymmetry (Yes/No).....

- Facial asymmetry (Right/Left).....

5) TMJ Evaluation:

TMJ problems.....

6) Minor problems:

- Decalcification (Yes/No)

E	D	C	B	A		A	B	C	D	E			
7	6	5	4	3	2	1	1	2	3	4	5	6	7
<hr/>													
7	6	5	4	3	2	1	1	2	3	4	5	6	7
E	D	C	B	A		A	B	C	D	E			

- Periodontal evaluation

E	D	C	B	A		A	B	C	D	E			
7	6	5	4	3	2	1	1	2	3	4	5	6	7
<hr/>													
7	6	5	4	3	2	1	1	2	3	4	5	6	7
E	D	C	B	A		A	B	C	D	E			

- Caries evaluation (Yes/No)

E	D	C	B	A		A	B	C	D	E			
7	6	5	4	3	2	1	1	2	3	4	5	6	7
<hr/>													
7	6	5	4	3	2	1	1	2	3	4	5	6	7
E	D	C	B	A		A	B	C	D	E			

- Hygiene evaluation (Perfect/Medium/Bad):.....

- ▣ In medical and dental history: ask the patient if he using medication for any reason or not, also asking whether he visit the doctor or not.
- 1. Heart disease
- 2. Rheumatism
- 3. Anemia
- 4. Hepatitis, liver problems
- 5. Diabetes
- 6. Asthma
- 7. Arthritis
- 8. Allergy
- 9. Information are taken about mental and emotional disturbances

- ▣ Chronic medical problems, orthodontic treatment in adults and children is not contraindicated but it requires some measures to be taken before starting the treatment.

- ▣ Chronic medical problems:
 - In the presence of cardiac problems / rheumatic fever, prophylaxis is necessary to against the subacute bacterial endocarditis. in these patients antibiotics should be initiated before any procedure (e.g. placement of band) that may cause bleeding.



- ▣ Hepatitis, liver problems

Patient with Hepatitis / liver problems, such as all other branches of Dentistry carry important for the infectivity.

- ▣ In patients with diabetes appliances are subject to change the mouth tissue reaction, Periodontal destruction is very quick and required careful monitoring.
- ▣ Arthritis: TMJ (temporomandibular joint) problems, and can cause changes in the form of lower jaw Growth.



▣ Allergy

may be in the form of cold acrylic / nickel allergy. In such a case hemorrhage and edema occurs in allergic tissue. When allergy has occurred instead of nickel-titanium material and instead of cold acrylics-warm acrylic can be used.

- Orthodontic treatment is contraindicated in the presence of acute and chronic periodontal disease.

- Treatment of patients with cleft lip and palate requires a multidisciplinary approach.

The multidisciplinary team

- Plastic surgeon
- Orthodontist
- ENT specialist
- Speech therapist
- Pedodontist
- Prosthodontist
- Also consists of psychiatric.

- Habits (finger sucking, tongue thrust. Etc.), provides information about the reason malocclusions.
- Dental / facial trauma: It explains the etiology of some orthodontic problems; If there is dental trauma: occlusion may deteriorate, root resorption may be increased. as a result of facial trauma, facial asymmetry may develop.

- Familial facial features, explains some of skeletal problems and genetic problems. Example: excessive mandibular development indicates the transition of genetic, if it seen in the family is seen also in the children.

2. Status of the physical growth

- The prognosis in orthodontic treatment are greatly affected by growth.
- Skeletal symptoms of orthodontic problems with appropriate period of time to intervene is in the most growth acceleration.
- Therefore the starting time of growth is very important for orthodontic Treatment Planning.

- ▣ Determination of developmental age of the patient are important in understanding **how much more growth remain.**
- ▣ We know a patient's growth will continue until to completed sexual maturation.

- ▣ The methods used for the determination of the physical growth:
 - The information about the growth rate obtained from the patients.
 - Measurements of height and weight

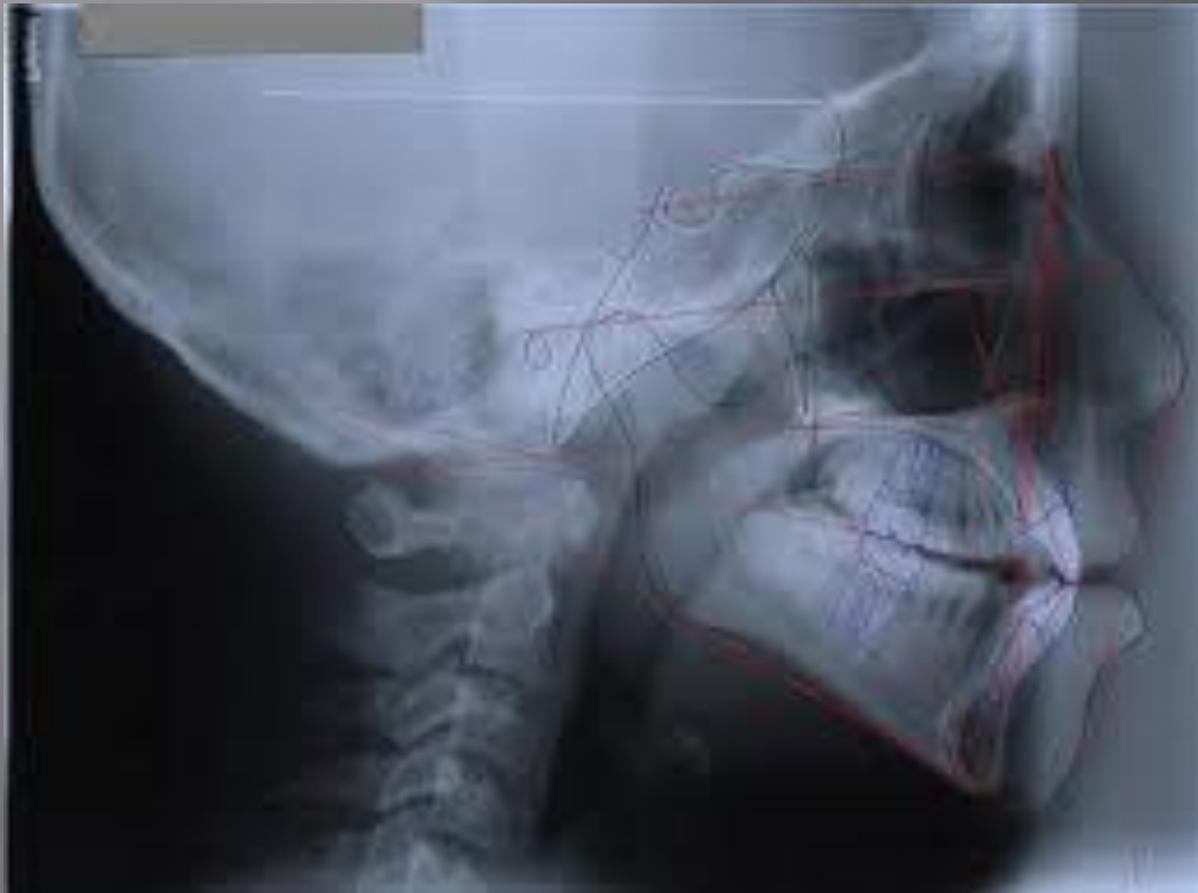
Other methods

- Hand -wrist films
- Cephalometric films

- ▣ Growth is evaluating by 3 ages:
 1. Chronological age
 2. Dental age: is determined according to the amount of calcification in the permanent teeth. Not give any information about the skeletal development
 3. Skeletal / bone age: is determined by hand-wrist films, shows different degrees of calcification of the bones.

- ▣ Growth spurt
- ▣ In the girls
 - Starts between the ages 9.5-10.5
 - Finishes between the ages 14-15
- ▣ In the boys
 - Starts between the ages 10.5-15
 - Finishes between the ages 13.5-17.5

- ▣ Evaluation of the growth by the cephalometric films:



3. An assessment of the patient in terms of social behavior:

Why would you like to be treated?

- ▣ Factors that increase the success of orthodontic treatment:
 - Patient's believe in the benefit of the treatment
 - Family have a voice on the child
 - In adult patients must have realistic expectations about the outcome of treatment

- ▣ Patients want to be treated for two reasons
 - Correction of the dental and facial aesthetics
 - Correction of the occlusion and jaw functions

