



Orthodontic

Orthodontic diagnosis

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Orthodontic diagnosis deals with the recognition of vary characteristics of malocclusion. It involves collection of data in a systemic manner to help in identifying the nature and cause of the problem.

Essential diagnostic aids

They include -

- ♣ History taking
- ♣ Case history
- ♣ Personal details
- ♣ Chief complaints
- ♣ Medical history
- ♣ Dental history
- ♣ Patient's personal history
- ♣ Family history
- ♣ Social history

Clinical examination

- ♣ General examination
- ♣ Extra oral examination
- ♣ Intra oral examination
- ♣ Functional examination
- ♣ Study model
- ♣ Certain radiographs:
 - ✓ Periapical radiograph
 - ✓ Bite wing radiograph
 - ✓ Panoramic radiograph / Orthopantomograph

A. History taking:

Case history:

It is the recording all the relevant information from the patient and the parents that might be necessary for examination, diagnosis and treatment planning is known as case history. Personal details or case history should be started with name, age, sex, address, height and weight, and occupation of the patient.

- A. **Name:** It helps in identification and location of the patient. Most patients like being called by their name.
- B. **Age, Sex, Height & Weight:** Helps us assessing the growth status of the patient.
- C. **Address & Occupation:** Helps in evaluation of socio-economic status of the patient & parents. This helps us selection of an appropriate appliance.

B. Chief complaints:

The patient's chief complaint should be recorded in his or her own words. This helps the clinician in identifying the priorities & desires of the patient. Most patients seek orthodontic care for the reasons of either esthetic or impaired function. Occasionally patient might be referred from others practitioners for specific reason such as-

- + Correcting occlusal prematurities,
- + To maintain the space of lost deciduous teeth
- + Re-alignment of tilting teeth
- + Providing an occlusal sprint as part of orthodontic treatment.
- + Surgical splint prior to orthodontic surgery.

C. Medical history:

Before orthodontic treatment is undertaken, a full medical history is recorded. Some conditions may require certain precaution taken prior to or during orthodontic treatment. For example-

- Acute debilitating diseases like mumps, chicken pox should be allowed to recover before orthodontic treatment.
- History of repeated cold, allergic rhinitis, pneumonia, tonsillectomy, adenoidectomy should be examined for nasal obstruction before taking orthodontic treatment; especially with oral screen, activator which obstruct oral airway.
- Patient with history of allergy to acrylic resin might be managed with fixed appliance
- Epilepsy patient may impede orthodontic treatment.
- History of blood dyscrasias may need special management if extractions are planned.
- Diabetic patient can take orthodontic treatment if it is control.
- Rheumatic fever or cardiac anomalies require antibiotic coverage.

→ Severely handicapped child either mentally or physically may require special management.

D. Dental history:

It reveals nature of previous exposure & attitude of the patient towards dentistry.

E. Patient's personal details:

It includes those details of patient's prenatal, at birth & early post natal life.

1. Prenatal history:

Nutritional disorder, drugs taken, diseases and accident of the mother during pregnancy.

- Uterine posture, fibroids in the mother, amniotic lesions etc. have been very small blamed for malocclusion.
- Drugs induced deformities such as -
- Thalidomide, injury and trauma may lead to oro-facial deformities.
- Tetracycline may cause brown staining of teeth
- German measles can cause cleft, lip and palate.
- Abnormal fetal position can lead to facial asymmetry.

2. At birth:

Injury to temporomandibular joint either due to intra- uterine pressure, or pressure due to forceps while delivery can result in ankylosis.

2. Early post natal life:

It includes duration of feeding, history of any habits, fracture of the jaw or teeth, and milestone of normal development.

F. Family history :

It is important cause malocclusion or any other oro-facial abnormalities present in family members which include parents, siblings and sometimes grandparents. Most of the number of skeletal class II & class III malocclusion are inherited and transmitted through a dominant gene. Congenital deformities like cleft, lip & palate are also transmitted.

G. Social history :

This is taken to understand patient socio-economic condition and the concern about the treatment and patient co-operation.