

Pedodontics

Fifth stage

Lec. 1

Diagnosis and treatment planning

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A dentist is traditionally taught to perform a complete oral examination of the patient and to develop a treatment plan based on the examination findings. The dentist then makes a case presentation to the patient or parents, outlining the recommended course of treatment. This process should include the development and presentation of a prevention plan that outlines an ongoing comprehensive oral health care program for the patient and establishment of the “dental home”.

Successful dental treatment for children can be achieved by recording a detailed history, a complete clinical examination, appropriate investigation, a thoughtful diagnosis about the patient and his family along with an informed consent before embarking upon the comprehensive treatment program for a child patient.

It is recommended that the first examination for the child be done at the time of the eruption of the first tooth and no later than 12 months of age. Early detection and management of oral conditions can improve oral health and, in turn, the general health and well-being of the child.

Obtaining accurate data in a child is very difficult. The reasons may be any of the following:

1. Most of the times, it is the parent or the guardian who will be providing the required data about the child and not the child himself or herself.
2. It is impossible to observe everything a child does or says and make accurate records of what goes on.
3. Most children do not behave in the dental clinic the same way as they

do at home or with their friends or teachers.

4. Data reported by parents and teachers may be inaccurate.

5. Information provided by parents or guardians is dependable on their emotional maturity.

6. Unless reports are made immediately after the observation, the parents may forget to mention minor yet important findings.

7. There may be a deliberate distortion by the observer to show the child or the parent in a favorable light.

Treatment planning

Treatment planning is the orderly or sequentially arrangement of the various treatment needs of the patient to provide maximum benefit to the patient as a whole.

The plan should include recommendations designed to correct existing oral problems (or halt their progression) and to prevent anticipated future problems. It is essential to obtain all relevant patient and family information, to secure parental consent, and to perform a complete examination before embarking on this comprehensive oral health care program for the pediatric patient. Anticipatory guidance is the term that often used to describe the discussion and implementation of such a plan with the patient and/ or parents.

Advantages of Treatment Planning

1. Avoiding the re-diagnosis at every visit.

2. Give serial appointments on the first day as the patient's treatment needs that are already planned in a sequential order (step-by -step guideline).

3. Instruments can be prepared well in advance before the patient's arrival for the treatment.

4. Estimation of the time and no. of appointments required as well as the total fee.

*Treatment plan must be discussed with the parents and permission taken before performing any treatment on the child.

*The followings information must be taken:

Dental need of their child including the treatment as well as the preventive measures. Amount of time required to perform the treatment and the total cost.

Treatment planning may be modified during the procedure based on the following:

- 1) Estimation of cooperation from the patient and parents.
- 2) Assessment of the condition of the teeth and the oral hygiene.
- 3) Whether extraction is needed or not.
- 4) Nature of tooth movement.

THE DIAGNOSTIC METHOD

Before making a diagnosis and developing a treatment plan, the dentist must collect and evaluate the facts associated with the patient's or parents' chief concern and any other identified problems that may be unknown to the patient or parents. Some pathognomonic signs may lead to an almost immediate diagnosis. For example, obvious gingival swelling and drainage may be associated with a single, badly carious primary molar. Although these associated facts are collected and evaluated rapidly, they provide a diagnosis only for a single problem area. On the other hand, sometimes there is a need to postpone a comprehensive diagnosis of all of the patient's problems or potential problems until conditions that are more urgent are resolved. For example, a patient with necrotizing ulcerative gingivitis (NUG) or a newly fractured crown needs immediate treatment, but the treatment will likely be only palliative, and further diagnostic and treatment procedures will be required later.

A thorough clinical examination of the pediatric dental patient not only includes intra- and extra oral examination but also comprise of complete general examination, it may include an assessment of the following:

- General growth and health
- Chief complaint, such as pain
- Extraoral soft tissue and temporomandibular joint evaluation
- Intraoral soft tissue
- Oral hygiene and periodontal health
- Intraoral hard tissue
- Developing occlusion
- Caries risk
- Behavior

Additional diagnostic aids are often also required, such as radiographs, study models, photographs, pulp tests, and, infrequently, laboratory tests.

Components of oral examination and diagnosis

1) Recording the history (medical, dental and familial). So to get a correct diagnosis, gathering complete and comprehensive information about the followings should be done:

- a. Vital statistics (demographic information about the child)
- b. Chief complaint and history of present illness
- c. Family (social) history and pre- and postnatal history about the child
- d. Medical and drug history. It may affect the child's growth and development (social and psychological) as well as the type of diet taken by the child).
- e. Past dental history
- f. Behavioral history

2) Examination of the patient (clinical and radiographical)

3) Provisional diagnosis

4) Special examination

5) Final diagnosis

6) Treatment plan (including medical referrals).

Notes:

1. Dental history Include:

- Previous care (treatment) in the dental office
- Oral hygiene.
- Habits.
- Previous and current fluoride therapy.

2. Information regarding the child's social and psychological development is important. Accurate information reflecting a child's learning, behavioral, or communication problems is sometimes difficult to obtain initially, especially when the parents are aware of their child's developmental disorder but are reluctant to discuss it. Mentally retarded child can be determined by asking question about the learning process and the child's behavioral and communication problem.

3. Behavioral history include any behavior problems in the dental office, which are often related to the child's inability to communicate with the dentist and to follow instructions.