PEDODONTICS

Lec.2 fifth stage

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Management of Children Behavior

**Behavior management**

Is the means by which dental health team effectively and efficiently performs treatment for a child and at the same time instills a positive dental attitude.

Strategies of the Dental Team

Primary objective during dental procedures is to lead children step-by-step so they develop appositive attitude toward dentistry. The success of these steps attributed to a number of factors:-

1. Child’s confident personality.
2. Parent’s proper preparation of the child for the appointment.
3. Dental team’s excellent communicative skills.

Strategies Of Behavior Management include:-

1. **Preappointment behavior modification**: using principles of learning theory.

**Behavior modification**: are techniques used to modify patient’s behavior which include anything that is said or done to positively influence the child's behavior before the child enters the dental operatory.

**Types of behavior modification:**

1. Films or video tapes to provide a model for young patient on the day of appointment or at a previous visit.
2. Live patient models such as siblings, other children, parents.
3. Preappointment mailings: teaching parents of new pedodontic dental patient how to prepare their children for the first dental visit.
4. **Fundamentals of behavior management –** the following fundamentals Centre on the attitude of the entire dental team:
5. Positive approach
6. Team attitude
7. Organization
8. Truth fullness
9. Tolerance
10. Flexibility
11. **Positive approach:** attitude of the dentist affect the outcome of the dental appointment so the positive statements increase the chance of success with children.
12. **Team attitude:** children respond best to a natural and friendly attitude in the dental office by using nicknames or asking them about their hobbies (baseball, football …) to initiate conversation and demonstrates a friendly and caring attitudes to a pediatric patient.
13. **Organization**: a well-organized, written treatment plan must be available for the dental office team which includes: the dentist, dental assistant, dental hygienist, and receptionist.
14. **Truth fullness:** this is very important to build a truth between the child and dentist and considered as a fundamental rule for dealing with children.
15. **Tolerance:** it refers to thedentist’s ability to cope rationally with misbehaviors while maintaining composure, and it varies from person to person.
16. **Flexibility:** the dental team must be flexible as the situation demands.

**Communication with children:**

Used for all patients who can communicate regardless to the method of communication.

There are several effective communication techniques can be suggested in order to establish a communication with children:-

1. **Establishment of communication:** by involving the child in conversation and there are many ways of initiating verbal communication depending on the age of child.
2. **Establishment of communicator:** communicator must be either the dental assistant in the reception room or the dentist in the operatory room because children can only listen to one person at a time. That means the communication occur from a single source.
3. **Message clarity:** so whenever communication occur there will be transmitter (dentist, medium (spoken words), and the receiver (pediatric patient). For pediatric patient the dentist’s work substitutes are like a second language. for example:-

Rubber dam = rubber raincoat

Rubber dam clamp = tooth button

Sealant = tooth paint

Topical fluoride gel = cavity fighter

Water syringe = water gun

Air syringe = wind gun

High speed = whistle

Low speed = motor cycle.

1. **Voice control:** sudden and firm commands are used to get the child’s attention or stop the child from whatever is being done.

For ex: - “stop *crying “or “pay attention”* which must be sudden commands.

1. **Multisensory communication:** non-verbal communication messages can be sent to patient or received from them like body contact or placing the dentist hand on the child’s shoulder give a feeling of warmth and friendship, also eye contact is important because when child avoid eye contact with the dentist that means that they are not ready to cooperate because the “communication is a reciprocal process”.
2. **Problem ownership:** the dentist when dealing with children, the message must be by using “I” message instead of “YOU” message. For ex:- the dentist say “ I can’t fix your teeth if you don’t open your mouth wide”.
3. **Active listening:** the dentist should have a good listening from the child during treatment because active listening is the second step in encouraging the kind of well communication between the dentist and child.
4. **Appropriate response:** when communication with children the response should be appropriate to the situation and the appropriateness of response depends on the extent and nature of the relationship with the child, the age of the child, and evaluation of the motivation of the child’s behavior.

**Techniques Of Behavior Management**

1. **The non-pharmaco-therapeutic approach.**
2. **The pharmaco-therapeutic approach.**
3. **The non-pharmaco-therapeutic approach include:**
4. Behavioral shaping

It is a common technique and defined as “that procedure which very slowly develops behavior by reinforcing successive approximations of the desired behavior until the desired behavior comes to be”. In behavior shaping the dentist should state the general goal to the child at the beginning, then explain the necessity for the procedure to the child and the explanation should be slowly and gradually because children who understood the reason of the procedure are more likely to be cooperative. Also the explanation should be at the child’s level of understanding by using successive approximations which is called “TELL-SHOW-DO” which mean the dentist should demonstrate various instruments step by step before their application by telling, showing, and doing, by using simple wards until the child aware of what happened in the dental procedure.

1. Retraining: This method used for apprehensive child or child with negative behavior as a result of previous dental visit or the effect of parent.
2. Aversive conditioning and physical restraint: - also known as (HOME) or Hand-Over-Mouth experience, its purpose is to gain the attention of the child so that communication and cooperation could be established. Used for children who cannot cooperate because of immaturity or failure of other management technique This technique used for children who screaming, kicking and also for highly appositional child, in this method the dentist need parents approval and need their understanding and the dentist places his hand over patient’s mouth to gain the attention of child for acceptance response to the dental procedure, then once the child become calm removal of the hands from the patient’s mouth is followed by words of praise as reward with re-enforcement to the desired behavior. Aversive conditioning sometimes used with physical restraint so called “restraint-aversive” conditioning. This technique is contraindicated for very young children or child with mentally or emotionally disabled or children with physical disabilities, also should not be used as a punishment.

**Physical restrain:**

A device used with medication for children patient in order to gain more comfotability for both dentist and patient during dental procedures.

**Types of physical restraints:**

1. **Papose board**: this is used to immobilize the child during dental procedure and it consist of head, chest arm and leg parts. The parent should be informed and given a consent form before using the restraint.
2. **Triangular sheet**: when using the dental chair should be in supine position to provide:

* More comfortability for the child and dentist.
* Prevent the ped.patient movement.
* **Mouth prop :**

Mechanical device used to keep the patient mouth opening and there are different kinds of mouth prop:

1. **McKesson bite-block:** present in different sizes, small for pedo.patient and large for adult patient.

This type of M.P. used mainly for epileptic patient and the block must have dental floss attached to it for easy removal of the block from the patient’s mouth if it dislodged in the mouth.

1. **Molt M.P.** :- looks like a scissors and available in different sizes.
2. **Tongue Blade (depressor):** used mainly for handicapped child during dental home care by parents and it is easily to be used, not expensive and disposable.
3. **Pharmaco-therapeutic approach** or called **“the pharmacological Management Of Children's Behavior”**:

In some difficult cases, the dentist can use drugs as an aid in the child’s behavior management to provide dental care.

The pharmacological approach by using either:-

1. Sedative drugs
2. G.A.

**Sedation:** is “a state of depression of CNS which reduces anxiety so enable treatment to be carried out satisfactory”.

**In sedation the patient:-**

1. Able to independently maintain his airway continually.
2. Able to independently maintain an open mouth.
3. Respond sensibly to verbal commands.
4. Retain adequate function of protective reflexes (ex:- laryngeal reflex).

**Sedation Technique Used :-**

1. For children who failed to be treated with non-pharmacological approach.
2. For young children with extensive disease and acute pain.
3. For children who lacks cooperative ability cause either psychologically or emotionally disturbed or child with mental or physical disability.

**Sedative Drugs given either by :-**

* Inhalation.
* Orally.
* I.V., I.M., SC.
* Rectal administration.

**Sedation technique need:**

* Highly experienced dentist.
* Medical history of child.
* Consent for the parent.
* Instruction to the parent and documentation.

**Inhalation By Nitrous Oxide And Oxygen**

1. It is most common used technique for mild to moderate dental anxiety.
2. It is safe, effective used to calm the child's fear of the dental visit and enhance effective communication.
3. Non allergic, rapid onset, reversible and non-addictive, commonly known as “laughing gas”.

the administration through a small breathing fitted mask placed over the child nose and as the child breathes normally ,uptake of gas occurs through the lungs allowing them to sleep with the child remain fully conscious and keep all natural reflexes .

**Oral Sedation:**

* **Antihistamines**
* **Hydroxyzine**

Rapidly absorbed from G.I.T. .Clinical effect seen in 15-30 min. with peak level at 2 hours and a mean half-life of 3 hours. Administration is preferably by the oral route.

**Adverse reaction:** extreme drowsiness, dry mouth and hypersensitivity.

**Dosage** oral 1 to 2 mg/kg.

* **Chloral hydrate derivatives ( Hypnotic ):-**

1. Long standing and effective sedative (duration 4-8 hours and the onset of action 30-60 min.).
2. Safe cause no respiratory depression at therapeutic level.
3. Has a few serious side effects.
4. The optimum dosage 25-50 mg/kg up to maximum 1 gram.
5. Has bitter taste and a potent gastric irritant and produce vomiting in many children.
6. Used for patient who lacking cooperative ability (mental retarded, emotionally disturbed or very young child).

* **Benzodiazepines : diazepam ( valium )**

1. Potential sedative agent (onset of action 2 hours).
2. Produce prolonged sedation
3. Optimum dosage 0.25-0.5 mg/kg orally to maximum single dose to 10 mg.
4. Used with or without L.A. .
5. Used for potentially cooperative child.

**G.A.**

* General anesthesia are drugs which produce reversible loss of all sensation and consciousness.
* Features of G.A. are:-

1. Loss of all sensation specially pain.
2. Sleep (unconsciousness) and amnesia.
3. Immobility and muscle relaxation.
4. Abolition of reflexes.

* **Indication of G.A.**

1. Patient who cannot cooperate due to lack of psychological or emotional maturity and mental, physical, or medical disability.
2. Patient whom local anesthesia is ineffective because of acute infection, anatomic variation or allergy.
3. Extremely uncooperative, fearful, anxious child.
4. Patient requiring significant surgical procedures.

* **Contraindication of G.A.**

1. Healthy, cooperative child with minimal dental needs.
2. Predisposing medical conditions which makes G.A. inadvisable.