ri Aurobindo College of Dentistry

Indore, Madhya Pradesh

INDIA

Module plan

- Topic : ***Determination Of Prognosis***
- Subject: Periodontics
- Target Group: Undergraduate Dentistry
- Mode: Powerpoint – Webinar
- Platform: Institutional LMS
- Presenter: Dr.Gagan Jaiswal

Definition

- *Prognosis is a prediction of the probable course duration and out come of the disease based on the general knowledge of the pathogenesis of the disease and presence of risk factors of the disease.*

- It is established after diagnosis and before treatment plan.

TYPES OF PROGNOSIS

- ***Excellent prognosis:***
- no bone loss, excellent gingival condition, good patient cooperation, no systemic or environmental factors.

- ***Good prognosis:***
- one or more of the following;

  Adequate remaining bone support, adequate possibilities to control etiological factors and establish a maintainable dentition, adequate pt cooperation, no systemic or env factors, or if present, they are well controlled.

- ***Fair prognosis:***
- one or more of the following; less than adequate remaining bone support, some tooth mobility, grade I furcation involvement, adequate maintenance possible, acceptable pt cooperation, presence of limited systemic or env factors.
- ***Poor prognosis:***
- one or more of the following; mod to adv bone loss, tooth mob, grade I and II furcation involvement, difficult to maintain areas or doubtful pt cooperation, presence of systemic or env factors.

- ***Questionable prognosis:***
- one or more of the following; advanced bone loss, grade II or III furcation involvement, tooth mob, inaccessible areas, presence of systemic or env factors.
- ***Hope less prognosis:***
- one or more of the following; advanced bone loss, non maintainable areas, presence of uncontrolled systemic or env factors.

- ***Provisional prognosis:***

- It allows the clinician to initiate t/t of teeth that have a doubtful out look in the hope that a favorable response may tip the balance and allow teeth to retain.

OVERALL V/S INDIVIDUAL PROGNOSIS

- Overall prognosis answers the following questions:

- Should t/t be undertaken?
- Is t/t likely to succeed??
- When prosthetic replacement are needed, are the remaining teeth able to support the added burden of the prosthesis???

- Individual tooth prognosis is determined after overall prognosis.

- Local factors, prosthetic factors and restorative factors have a direct effect on the prognosis of individual teeth.

FATORS IN DETERMINATION OF PROGNOSIS

OVERAL CLINICAL FACTORS:

- Pt age
- Disease severity
- Plaque control
- Pt compliance

SYSTEMIC AND ENV FACTORS:

- Smoking
- Systemic disease and condition
- Genetic factors
- Stress

LOCAL FACTORS:

- Plaque and calculus
- Sub gingival restoration

- **Anatomic factors:**

- Short tapered roots
- cervical enamel proj
- Enamel pearls
- Bi furcation ridges
- Root concavities
- Developmental grooves
- Root proximity
- Furcation inv

- Tooth mobility:

Prosthetic and rest factors:

- Abutment selections
- Carries
- Non-vital teeth
- Root resorption

PATIENT AGE:

- For two pt with comparable levels of remaining c.t tissue attachment and alv Bone the prog is better for the older of the two.

DISEASE SEVERITY:

- Pt history of previous perio disease may be indicative of the susceptibility for future perio breakdown.

- Pocket depth is less imp than the cal, because it is not necessarily related to bone loss.
- Prog can be related to the height of remaining bone. The type of defect must also be determined.

PLAQUE CONTROL:

- Effective removal of plaque on a daily basis by the pt is critical to the success of periodontal therapy and to the prog.

PT COMPLAINCE AND COOPERATION:

SYSTEMIC AND ENV FACTORS:

- ***Smoking:***
- Affect not only the severity of perio destruction, but also the healing potential.

- ***Systemic disease or condition:***
- Prevalence and severity of periodontitis are significantly higher in pt with diabetes and that the level of control of diabetes is an imp variable in this relationship.
- Prog is questionable when is surgical perio t/t is req, but can not be provided because of pt health. Eg.. Parkinson's disease.

- ***Genetic factor:***
- Genetic polymorphism in the interleukin I gene, resulting in increased production of IL-1 beta, have been associated with a significant increase in risk for severe, generalized, chronic periodontitis.
- It also influence neutrophil.
- ***Stress:***

LOCAL FACTORS

- ***Plaque and calculus:***

- ***Sub-gingival restorations:***

- *Anatomic factors:*
- Short roots…poor prog.
- CEP: extensions of enamel which extends in the furcation.
- Enamel pearls: large round deposits of enamel that can be located in furcation.

- ***Bifurcation ridges***: extends in the furcation. Interferes with the attachment of attachment apparatus.
- ***Root concavities***, ***Dev grooves*** and ***Root proximity:*** creates area that is difficult for the pt and dentist to clean.
- ***Tooth mob:*** caused by inflammation or T.F.O can be correctable. But due to bone loss not likely to be corrected completely.

Prosthetic and restorative factors:

- Its always key tooth which decides whether other teeth are saved or extracted.

- ***Carries , Non-vital teeth and Root resorption:***
- For teeth with extensive carries, the feasibility of adq restorations and endo therapy should be considered before undertaking perio t/t.
- Root resorption jeopardizes the stability of the teeth and adversely affects the response to perio t/t.
- Prog for non-vital teeth does not differ from vital teeth.