

DATE: Saturday, November 23rd, 2013
WHERE: Lisbon

Data collection, esthetic evaluation and the compilation of a comprehensive treatment plan - An interactive seminar

In this course, the diagnostic and prognostic data necessary for planning a prosthetic treatment with a predictable outcome will be discussed. The dentofacial evaluation will be illustrated as the starting point for the formulation of a sound approach to complex rehabilitations with high esthetic implications. The interaction between esthetic changes and functional consequences will be stressed. The in-depth analysis of several clinical cases will give the opportunity to challenge and demonstrate the application of the systematic method used by the speaker.

AIMS OF A PROSTHETIC REHABILITATION

- Replace the biologic tissues which have been lost
- Reestablish masticatory function
- Reestablish phonetics
- Reestablish or improve esthetics
- Remain unchanged as long as possible

STRATEGIES

- Diagnose all the problems of the patient
- Do not start an “invasive” therapy without having first understood where it will end up
- Evaluate with care each tooth’s prognosis
- Assess whether the patient is compliant and understands well the therapies which are necessary and planned
- Where indicated and possible, give the patient more than one therapeutic plan, explaining pros and cons of each

I. DATA COLLECTION

When speaking with the patient, it is important to:

- Understand with whom we are dealing, what are his/her expectations
- Know his/her chief complaint
- Know his/her dental history
- Become aware of past problems and understand how to avoid and prevent them
- Find out if there are latent pathologies that can present themselves during or after the therapy
- Ask for possible limitations of time or economics
- Custom fit the work plan

For the collection of a full documentation, you should obtain:

1. Medical and dental history
2. Extraoral clinical examination
3. Intraoral clinical examination
4. Radiographic exam

5. Diagnostic models
6. Facebow
7. Intermaxillary registration

OCCLUSAL DIAGNOSIS (according to Dr. John Kois)

- | | |
|---|-----------------------------|
| I. Acceptable function | - no treatment is necessary |
| II. Constricted envelope of function | - curable |
| III. Occlusal dysfunction | - curable |
| IV. Parafunction | - can only be managed |
| V. Neurologic disorders | - can only be managed |

I. Acceptable function

- Efficient use of the masticatory muscles
- Pathologic conditions may exist if extrinsic (diet) or intrinsic factors (development anomalies) cause premature loss of dental structure
- MIP: localized with ease, precise, balanced and of the same intensity bilaterally
- Masticatory movements:
 - ✓ efficient opening and closing movements
 - ✓ no premature contact that may load the teeth (check for anterior fremitus)

II. Constricted envelope of function

- Position of the anterior teeth limits the range of masticatory movements
- Joint symptoms, tired muscles, no wear on posterior teeth
- Wear on buccal of lower incisors and palatal of upper incisors (fremitus)
- The patient chews quickly and swallows

III. Occlusal dysfunction

- Inefficient use of masticatory muscles
- Presence of posterior interferences to reach MIP
- Muscle hypertrophy, posterior wear facets
- The patient avoids hard and chewy foods
- Often unilateral muscle pain

IV. Parafunction

- Destructive use of the masticatory system
- Patient may have normal function
- An occlusal dysfunction may worsen the pathologic problems
- EXAMPLES: voluntary: chewing gum; habits: clenching; involuntary: bruxism

V. Neurologic disorders

- Destructive use of the masticatory system
- Extrinsic factors: medications, drugs
- Intrinsic factors: disorders of the central nervous system

II. DIAGNOSIS

It is important to diagnose all the problems before proceeding with the treatment. The possible problems are:

- ✓ gingivitis
- ✓ periodontal disease (initial, moderate, severe, complicated)
- ✓ occlusal traumatism (1 or 2)
- ✓ caries
- ✓ defective restorations
- ✓ pulpitis or inadequate endodontic treatments
- ✓ missing teeth
- ✓ malocclusion
- ✓ loss of occlusal vertical dimension
- ✓ parafunction
- ✓ tooth abrasions
- ✓ oral pathologies
- ✓ impacted teeth

As far as the periodontal diagnosis is concerned:

PERIODONTAL DIAGNOSIS		LOSS OF PERIODONTAL SUPPORT
Light	Corresponds to	<25%
Moderate		25-50%
Severe		>50%
Complicated		Furcation involvement Deep angular defects

III. PROGNOSIS

It is decided after having evaluated:

- ✓ the state of health of the patient
- ✓ his/her motivation
- ✓ the number of compromised teeth which can be maintained with the therapy
- ✓ if there are parafunctional habits

The therapeutic options that can be offered to the patient depend on the prognostic evaluation of each abutment. There are two levels of prognosis:

1. GENERAL (for the entire mouth)
2. SPECIFIC (for each tooth)

PROGNOSTIC CATEGORIES - 3 levels:

- a. Good
- b. Questionable
- c. Hopeless

IV. TREATMENT PLAN

To formulate a comprehensive treatment plan, it is necessary to analyze all collected data (charting, radiographs, diagnostic models, photographs, movies) and to choose the most appropriate therapies with a multidisciplinary approach.

In order to facilitate the analysis of the patient and determine the necessary therapies, a list of 9 questions has been formulated:

QUESTION	ANSWER	ACTION
1. Is the apico-coronal position of the incisal margin of the upper anterior teeth (central incisors) at the correct level with respect to the lips, at repose and in a forced smile?		
2. Is the clinical crown of the upper anterior teeth of the proper length?		
3. Is the gingival margin of the upper anterior teeth at the correct level (with respect to the lips and to the adjacent teeth)? If not, would you do something about it and, if so, what therapy would you recommend?		
4. Is there enough overbite for an efficient anterior guide?		
5. If the teeth are too long and they were to be shortened, how will the overbite be modified? Will it be enough to provide an effective anterior guidance?		
6. If the upper teeth are short and they have to be lengthened incisally, is there a possibility to do it?		
7. Is the clinical crown of the lower anterior teeth of the proper length? Are they visible enough with respect to the lower lip?		
8. When taking in consideration the posterior teeth, if indicated, is there the need/ possibility to alter VDO (i.e., for lack of posterior space, or because all the teeth have to be crowned)?		
9. If the VDO is altered (increased or decreased), how can the new overjet be managed?		

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