

Prosthetics I.

Rehabilitation of the masticatory apparatus

Function of dentition

- Food admission Trituration (comminution) of food
- Phonation
- Aesthetics - psychology

Consequence of not treated dentition – malfunction of dentition

- Insufficient comminution of food – digestive disorders – irritation, diseases of the digestion apparatus.
- Disorders of phonation
- Alteration external appearance (teeth support soft tissues, keep intermaxillary relations)
- Psychological aspect of lost teeth (sign of health, good social position, self-realization)

Prosthesis (denture)

Rehabilitation of:

- Function
- Comfort
- Aesthetics
- Phonation

Damaged teeth

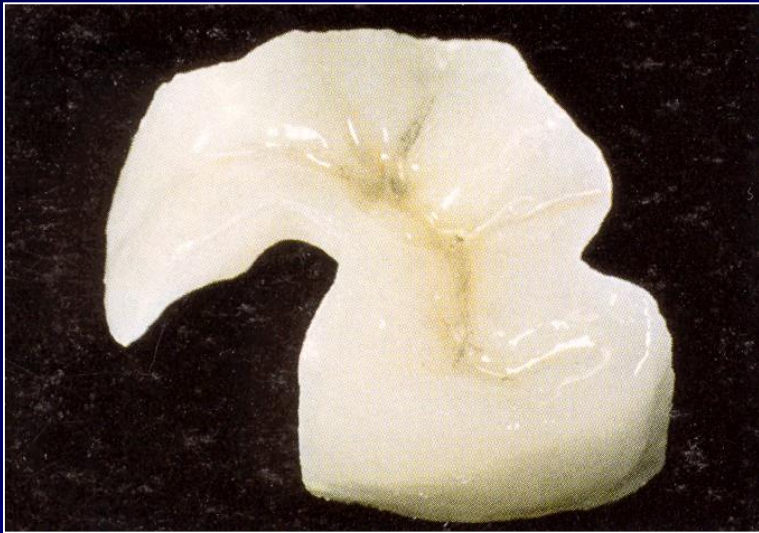
– *reconstruction of the crown*

Missing teeth

- *appropriate prosthesis (denture)*

Prosthesis

- Individually made
- Differences
 - in the type of defect, extent and location
 - in the size, shape and position of teeth
 - in the quality of hard and soft tissues of the oral cavity
 - in intermaxillary relations





Fixed dentures

- Material – metal alloy, ceramics, composite materials, other resins



- Cemented in/on the teeth – abutment teeth, pilots.

Removable dentures

- Partial
- Complete (full)



Celková náhrada - horní a dolní



- Patients can remove and clean

Fixed dentures

- Cemented on the teeth – crowns, bridges, inlays

Removable dentures

- Partial
- Complete (full)

Planning of the denture

Complex examination

1. Extent and location of the defect
2. Damage of the involved teeth (caries, fillings atc.)
3. Periodontium
4. Shape, size, position of teeth, relationship to the neighbours
5. Occlusion, articulation – relationship to the antagonists
6. Quality of the alveolar process
7. The level of oral hygiene
8. X-ray examination – level of alveolar bone, periapical pathology,
9. Study impressioons – study models
10. Detail evaluation of the abutment teeth (pilots) – most impoprtant teeth – canines, premolars

Classification of defects Voldřich

I. Class

One or more teeth are missing

Small gaps – 1 – 2 teeth

Big gaps 3 – 4 teeth at most. This big gaps must be demarcated by pilot of the best quality. (canine, 1st or second molars – pilots of 1st class or their equivalents)

Classification of defects Voldřich

II. Class

Reduced dental arch, then last tooth is the second molar.

With gaps

Without gaps

Bilateral

Unilateral

Classification of defects Voldřich

III. Class

Individual teeth or small groups of teeth

Classification of defects Voldřich

IV. Class

Edentulous dental arch

Classification of pilots (abutment teeth)

Pilots I. class

Canines

Molars (1st, 2nd)

Classification of pilots (abutment teeth)

Pilots II. st class

Incisors - maxillary incisors, premolars

Classification of pilots (abutment teeth)

Pilots III. class

Mandibular incisors, third molars, all teeth with bad biological factor

Biological factor

- Caries
- Pulp vitality
- Level of the endodontic treatment
- Level of the resorption of the alveolar bone
- Periodontium
- Relationship to antagonists
- Relationship to neighbour teeth

Way of the transfer of masticatory forces

- Tooth
- Tooth and oral mucosa
- Oral mucosa