III-VI, nr.1

Partial edentulism. Etiology and pathogenesis of partial edentulism. Clinic of partial edentulism.

Permanent bite of the modern man - includes 28 - 32 teeth, 14 - 16 on each jaw.

<u>The partial edentulism</u> may be defined as <u>the absence from 1 to 13-15 teeth on one dental-</u> <u>alveolar arch.</u>

<u>Types of edentulism – partial,</u> - complete.

Influence of defects on the organism

a) local

b) local-regional

c) general

As clinical forms of reduction of teeth number can be defined:

- anodontia
 - hypodontia
 - oligodontia
- Researches made by our cathedra has established that partial edentulism in <u>Moldova</u> consists 611 people from 1000 moldavian population (and in the country 653; in the city 599 from 1000; and more often it can be met at men population).
- Analysing received results incidence of partial edentulism according to Kennedy classification was established that:
- I class 87,8 patients from 1000 people

II class – 67,9 patients from 1000 people

III class – 430 patients from 1000 people

IV class – 25 patient from 1000 people.

<u>South zone</u> – 711 from 1000 people, <u>Central zone</u> – 626 from 1000 people, <u>North zone</u> – 538 from 1000 people.

Ethiological factors of partial edentulism theoreticaly can be divided into:

- congenital factors
- obtained factors.

The pathogenesis of partial secondary edentulism

depends on etiologic factor, associated diseases, age, previous made treatment ...

Some criteria for classification of partial edentulism:

- I according to the number of abcent teeth:
 - a) reduced (small) absence from 1 till 3 teeth
 - b) medium absence from 4 to 6 teeth
 - c) large or extended absence from 6 till 8 teeth (presence not more then 6 teeth)
 - d) subtotal presence from 1 till 2-3 teeth (according to some authors till 5 teeth).

- II according to topographical criteria:
 - a) in frontal area
 - b) in lateral area
 - c) in frontal and lateral (one side or two sides) area.
- III depending the jaw:
 - a) on the upper jaw
 - b) on the lower jaw
 - c) on both jaws.
- IV depending the position of remained teeth:
 - a) therminal edentulism (remained teeth are situated mesial)
 - b) intercalate edentulism (remaned teeth are situated mesial and distal)
 - c) frontal edentulism.

<u>Diagnostic criteria</u>

- 1. *Topography and extention* of the edentulous area(s)
- 2. Condition of the abutment teeth
- 3. Occlusal scheme
- 4. Residual ridge

Classification of partial edentulism by Edward Kennedy:



Classification of partial edentulism by Kennedy-Applegate



Classification of partial edentulism by Costa (by topographical criterion):



Clinic of partial edentulism

- extra-oral symptoms: colaps of chheks, lips etc.

- intraoral symptoms: migration of teeth, atrophy of alveolar process, pathological tooth mobility, inflammation in periodontium etc.

The main signes of functional pathology in secondary partial adentia should be considered:

a) <u>migration of teeth</u>

b) <u>atrophy of alveolar process</u>
c) <u>pathological tooth mobility</u>

d) *inflammation in periodontium.*

As a result of tooth losing

<u>I – functional</u> <u>II – nonfunctional group of teeth</u>

Prosthodontic Diagnostic Index (PDI):

Criteria 1: location and extent of the edentulous area(s) Criteria 2: abutment teeth conditions Criteria 3: occlusion Criteria 4: residual ridge

Treatment of patients with partial edentulism

Partial Fixed Denture
Partial Removable Denture

- Fixed or Removable Denture on implants.

Components of diagnosis at partial edentulism

- the anatomo-clinical diagnosis

- the topographical part

- the diagnosis of the clinical form of the edentulism

- the etiological diagnosis

- the functional diagnosis

- the evolutive diagnosis

- the diagnosis of complications

- the prognoses of the partial edentulism

- the diagnosis of the therapeutically stage