

DENTO-MAXILLARY RADIOLOGY AND IMAGING

Course 14

RADIODIAGNOSTIC OF PERIODONTAL DISEASE

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14.1.2.1. Acute marginal periodontitis

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14.1. MARGINAL PERIODONTOPATHIES

Inflammatory - degenerative disorders group of periodontium, dento-alveolar anatomic complex, formed of:

- gingiva,
- alveolo-dental ligament,
- alveolar bone and
- cementum.

Depending on anatomic structures lesional implied marginal periodontopathies are classified in:

- gingivitis,
- marginal periodontitis.

14.1.1. Gingivitis

Is only soft tissues inflammatory disease with an acute or chronic evolution. Depending on histological aspect there were described:

- simple gingivitis,
- hyperplastic gingivitis,
- acute necrotizing ulcerative gingivitis.

All these forms are exclusively clinic diagnosed, being without a radiographic correspondent.

14.1.2. Marginal periodontitis

Is the periodontal disease with all anatomic structures lesional implied and also corollary osseous modifications.

There were described the following anatomo-clinical forms:

14.1.2.1. Acute marginal periodontitis

Also known as lateral periodontal abscess or parulis, an acute suppurative type of inflammation, destroying in several days the alveolar bone with regional secondary puss accumulation and usually spontaneously latero-marginal drain.

14.1.2.2. Chronic marginal periodontitis

In which by epithelial insertion destruction and caudally migration results a deepening of gingivo-dental sulcus, with periodontal pockets formation, defining diagnosis elements for chronic marginal periodontitis.

According to anatomo-clinic forms and evolution type chronic marginal periodontitis may pass through three stages:

- initial,
- moderate,
- advanced,

depending on:

- the depth of periodontal pockets,
- the quantity of bonny loss by resorbtion and
- the teeth mobility degrees.

INITIAL STAGE

Radiographic exam of chronic marginal periodontitis in initial stage, the only one without teeth secondary mobility, detects defining diagnosis elements:

- marginal halisteresis due to the osseous septum demineralization, appearing as a linear vertical radiolucency at the interdental septum level.
- marginal triangulation appear due to lamina dura destruction at the limbus level with widening of periodontal space around the dental collet with secondary formation of a circular crater between the limbus and radicular cementum, radiographic detectable as a triangular radiolucency with the base to the crown, nearby the limbus.
- pinching of the interdental septum is caused by osteolysis and represents a loss of alveolar crest continuity.

MODERATE STAGE

It is characterized by deepening of periodontal pockets associated with a moderate osseous resorbtion and the appearance of mild teeth secondary mobility.

ADVANCED STAGE

Is characterized by deep periodontal pockets, with severe vertical and

horizontal osseous resorption with radiographic aspect of “sink” or “funnel” around the affected teeth, with secondary appearance of an exaggerated teeth mobility. By the lesional extension to the apex level, the radiography detects a radiolucency surrounding all the tooth without bone contact suggesting a “tooth that floats” - floating dens.

14.2. JUVENILE PERIODONTITIS

Appear in puberty age with typical localization at the level of first incisors and molars with familial clustering, probably induced by specific microorganisms infectious of actinomycetes types.

Are radiographic diagnosed in adolescents by periodontal pockets and osseous resorption detection in elected sites: first incisors and molars.

14.3. PAPILLON - LEFÉVRE SYNDROME

It is a recessive autosomal inherited disease which associates palmo-plantaris hyperkeratosis, periodontal pockets and osseous resorption at the temporary or permanent teeth with dental loss in about 2 - 3 years period.