

Tooth resorption

- A pathological process in which the roots of permanent teeth are resorbed.
- We distinguish:
 1. Internal resorption (starts inside the tooth from the pulp side);
 - causes: pulpitis chronica clausa, does not cause problems.
 2. External resorption (begins on the outer surface of the root from the periodontium);
 - causes: periapical inflammation, tumors, cysts, retained teeth, replanted teeth



External tooth root resorption

Internal resorption

- is caused by a chronic inflammatory process (pulpitis chronica granulomatosis interna)
 - the resulting granulation tissue resorbs the surrounding dentin and cementum* if it is in the neck --> typical sign - '*pink spot*'
- Therapy:
 - endodontic treatment
 - temporary filling made of Ca(OH)_2 or other bioactive materials (MTA, Biodentine,...)

File:Resorption classification.png

External resorption

- external resorption generally occurs as a result of damage to the periodontal ligaments (whether mechanical, chemical or biological)
- the surrounding tissue reacts to this stimulus, it tries to break down the damaged tissue
- as part of this, TZT will also be resorbed
- subclassification:
 - replacement resorption
 - resorbed TZT are replaced by bone that grows into them
 - a solid dentin-bone connection is formed = ankylosis
 - inflammatory resorption
 - cause - from dentin (necrosis, infection)
 - toxins reach the periodontium through the dentinal tubules
 - granulation tissue is formed
 - followed by resorption
 - invasive cervical resorption
 - starts from cells below the epithelial attachment
 - cells resorb the cervical region of the tooth
 - we distinguish 4 types according to severity
 - surface resorption
 - e.g. as a result of orthodontic treatment
 - in the area of the pressure zone, hyaline necrosis of periodontal vessels will occur as a result of excessive pressure
 - surrounding tissue reacts to necrosis
 - results in small resorptions visible on the root of the tooth
 - pressure resorption
 - due to excessive occlusal forces
 - idiopathic resorption
 - for an unknown reason
- Therapy
 - depends on the extent of the defect and location
 - if it is a small defect in the neck area
 1. extirpation of granulation tissue
 2. Ca(OH)_2 or other bioactive material
 3. Emdogain
 - in the apex area
 - tip resection possible
 - otherwise we can try endodontic treatment and hope

Links

<https://www.slideshare.net/UDDent/root-resorption-stdntcopy>

https://www.researchgate.net/figure/Classification-of-root-resorption-A-Replacement-resorption-The-root-is-resorbed-and_fig1_225830442

Related Articles

- Abrasion (Dentistry)
- Atrice
- Erosion

References

- LIŠKA, Karel. *Orofacial Pathology*. 1. edition. publisher, 1983. 159 pp. ISBN 3180840161.
- WEBER, Thomas. *Memorix of Dentistry : translation 2nd edition, 279 illustrations*. 1. edition. Prague : Grada, 2006. 430 pp. ISBN 80-247-1017-X.