

SUPRA & SUBGINGIVAL CALCULUS

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Calculus is a hard deposit that is formed by mineralization of dental plaque on the surfaces or the root of natural teeth

- Calculus is also known as odontolithiasis or tartar.



Dental calculus is classified by its location on a tooth surface as related to the adjacent free gingival margins:



Supragingival Calculus



Subgingival Calculus

SUPRAGINGIVAL CALCULUS

- on the clinical crown coronal to the margin of the gingiva and visible in the oral cavity.
- Most frequent sites are on the lingual surfaces of the mandibular anterior teeth nWharton's duct and on the buccal surfaces of the maxillary molars opposite Stenson's duct.



SUBGINGIVAL CALCULUS

- Forms on the root surface below the gingival margin and can extend deep into periodontal pockets.
- Occurs with or without associated supragingival deposits.



Subgingival calculus can often be seen on radiographs on the mesial and distal aspect of teeth but explorer detection is needed to evaluate the amount of calculus present.



Calculus Formation

- Calculus is formed by the deposition of calcium and phosphate salts in the bacterial plaque. These salts are present in salivary and gingival crevicular fluids.
- Plaque mineralization begins within 24-27 hours and takes an average of 12 days to mature.



Characteristic (color)

Subgingival Calculus

White creamy-yellow, or gray may be stained by tobacco or food.

Subgingival Calculus

Light to dark brown, dark green or black stains.



Calculus Grading Scale

0- No calculus

1- Trace levels of calculus at gingival margin or between teeth.

2- (Slight) Calculus deposits 1mm or less.

3- (Moderate) Calculus deposits 1 to 2 mm, but covering less than one third of the tooth surface.

4- (Heavy) Calculus deposits greater than 2 mm, may extend over the soft tissue, or may bridge teeth.

Ways To Prevent Dental Calculus

- Brush two times a day for 2 minutes
- Floss at least once a day
- Dental cleaning every 6 months by dental hygienist

References

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