# CALCULUS: SUPRAGINGIVAL & SUBGINGIVAL

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### CALCULUS

- What is calculus?
  - Calculus (tartar) forms on the teeth when plaque is left on the surface to harden.
  - Calculus can form around the crown of the tooth (supragingival) and/or under the gingival margin of the tooth (subgingival).
  - If calculus is left on the surface of the teeth, it can start to irritate the gums and lead to gingivitis and later on, periodontal disease.





Mandibular Posterior Supragingival and Subgingival Calculus

### Radiographic Significance:

- Radiographically, calculus can appear on a radiograph if it is dense enough. Otherwise, even if it is physically there, it may not show up on a radiograph.
- Radiographic calculus appears radiopaque.
- Most radiographic calculus is shaped in a convex or triangular manner.

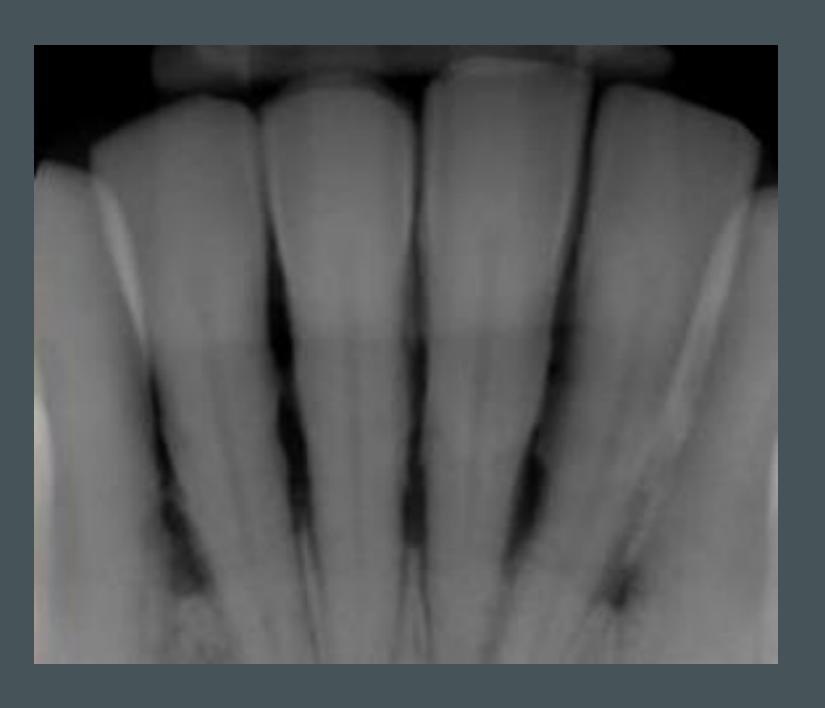
## SUPRAGINGIVAL CALCULUS

- Coronal to gingival margin
- White yellow color when seen in oral cavity



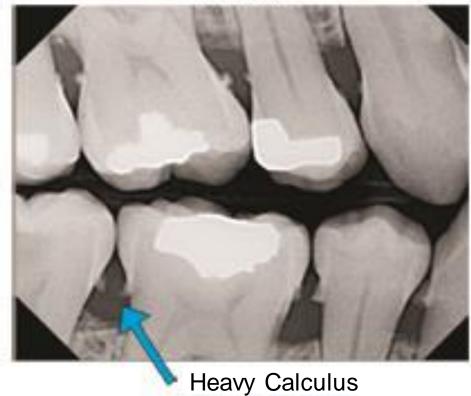
## SUBGINGIVAL CALCULUS

- Below the gingival margin
- Apical to CEJ
- Forms in gingival sulcus or in periodontal pockets
- Green black color due to gingival crevicular fluid



#### **EXAMPLE: DEEP CLEANING BEFORE & AFTER**

BEFORE AFTER







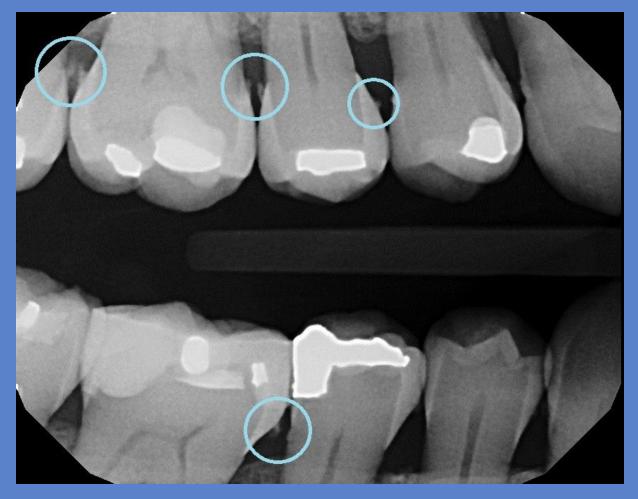
MAXILLARY ANTERIOR CALCULUS

SubgingivalCalculus between#8 & #9.



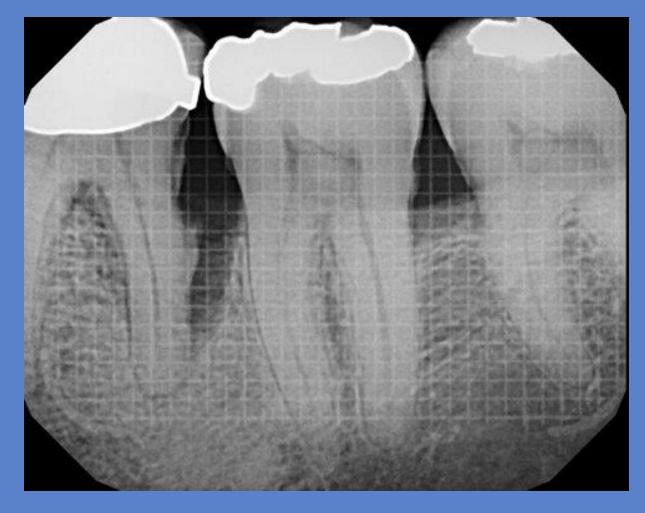
Mandibular Anterior Supragingival and Subgingival Calculus

MOST COMMON PLACE FOR **CALCULUS TO FORM** DUE TO THE **LOCATION OF** THE SUBMANDIBULAR SALIVARY GLAND, WHICH PRODUCES 60% OF SALIVA IN THE ORAL CAVITY.



Mandibular Posterior Calculus (subgingival & supragingival)

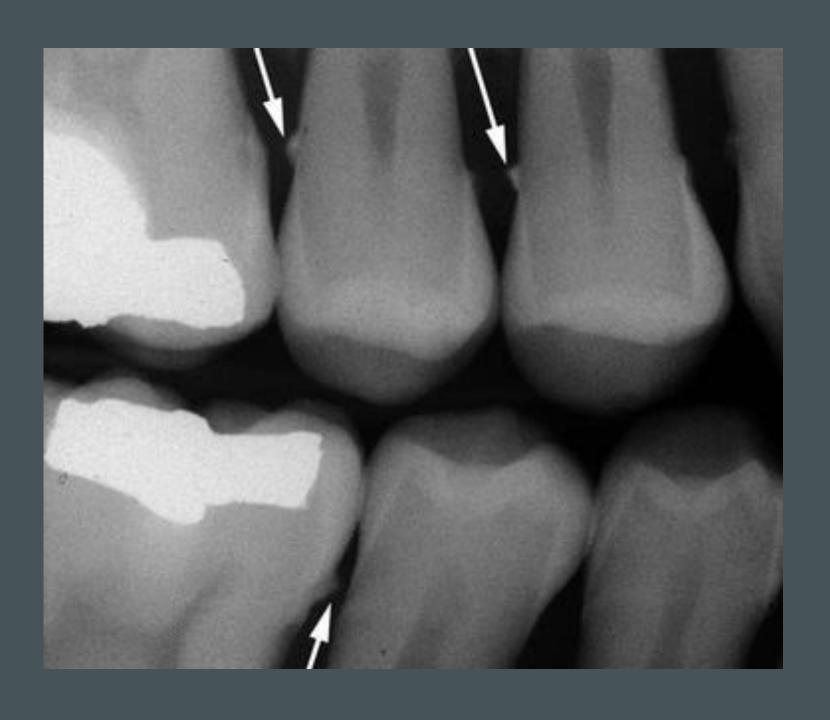
The 2nd most common area that calculus forms is in the posterior upper maxillary region due to the location of the parotid salivary glands.



Posterior Mandibular Subgingival Calculus

Deep subgingival calculus on distal of #19 due to presence of a periodontal pocket

- Subgingival and supragingival calculus is not easy/impossible to remove by oneself once it is mineralized on the tooth surface.
- Which is why dental hygenists have a very important job when detecting and scaling calculus.
- Thank your hygenist next time you have a cleaning:)



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