



# Dens in Dente

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# What is Dens in Dente?

- Also known as Dens invaginatus or Dilated Composite Odontome
- “Tooth within a tooth”
- Developmental anomaly due to the deepening or invagination of the enamel into the dental papilla before calcification of the dental tissue.
- Common in males than females.



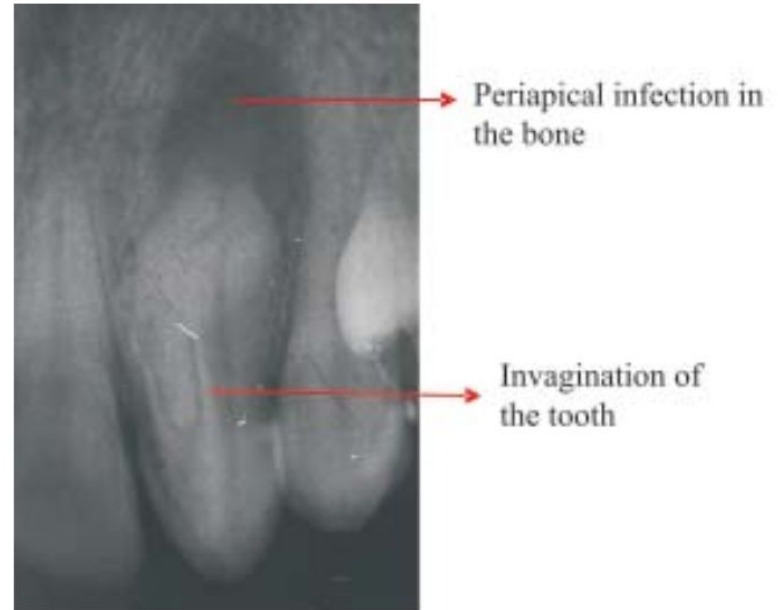
## Possible Causes:

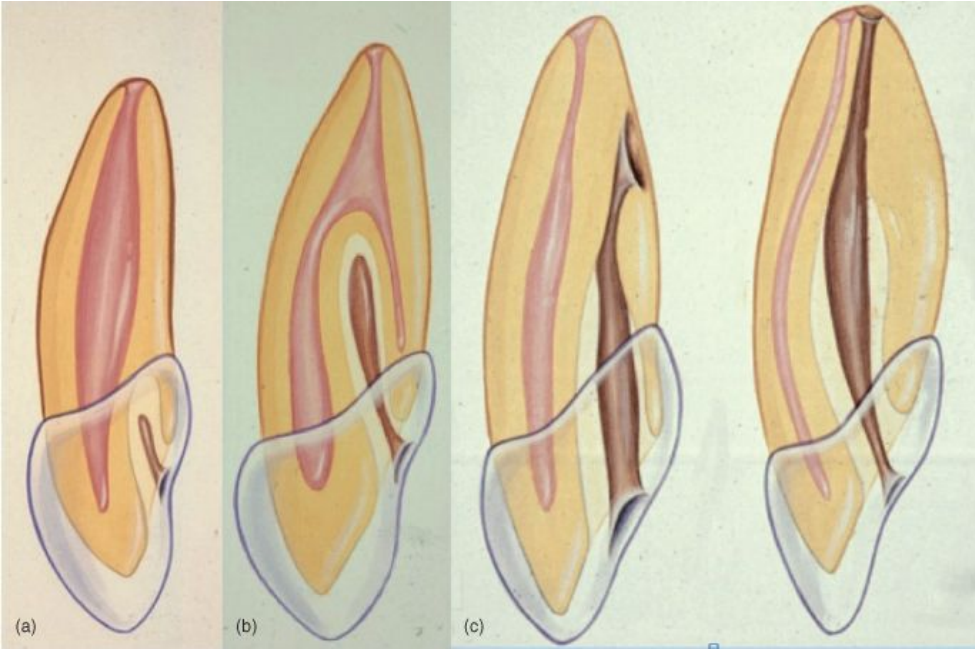
- Controversial and unclear. Several theories proposed.
  - Focal failure of growth of internal enamel epithelium while surrounding normal epithelium continues to proliferate
  - Rapid and aggressive proliferation of part of internal enamel epithelium invading dental papilla
  - Distortion of enamel organ during tooth development
- Genetic Factor
- Infolding of enamel into tooth structure during the early stages of bud formation

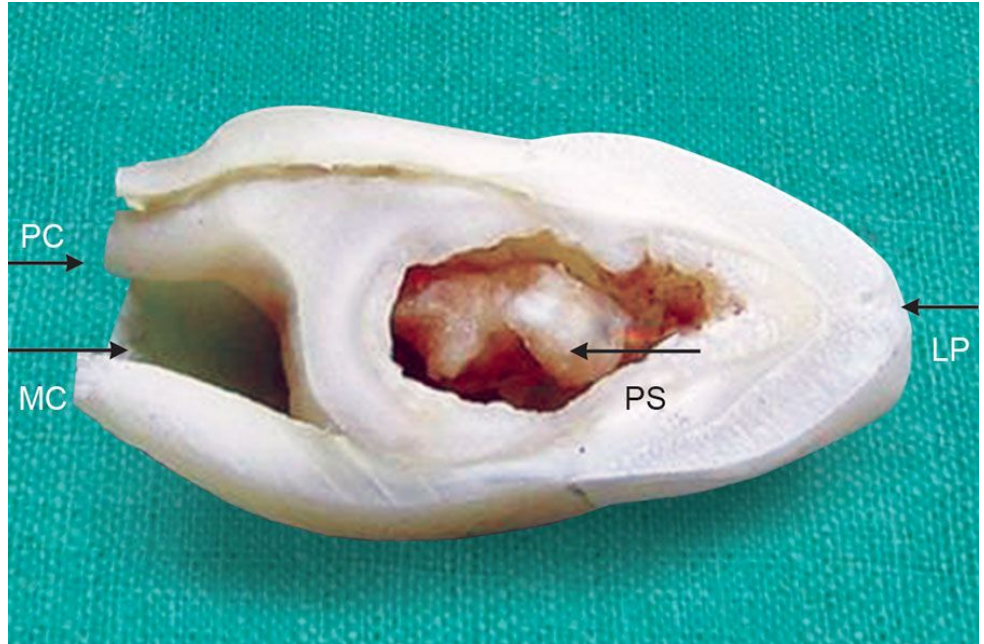
Normal Lateral Incisor:



Radiographic appearance of dens in dente:









# How the Dens in Dente Impacts the Patient Dentally:

- Tooth affected: mostly permanent maxillary lateral incisors
- Pain
- Non-eruption of tooth
- Higher risk of developing caries
- Can cause:
  - Abscess formation
  - Displacement of dental structures



## Role of Dental Team:

- Dens in dente is detected on radiograph
- Treatments:
  - Preventive sealing of invagination
  - Root canal treatment
  - Endodontic apical surgery
  - Intentional replantation
  - Extraction





## Sources:

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5026114/>
- [https://www.sriramachandra.edu.in/university/pdf/research/journals/jan\\_2007/book\\_10.pdf](https://www.sriramachandra.edu.in/university/pdf/research/journals/jan_2007/book_10.pdf)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3961942/>