

# FUSION

By: Janeth Rud  
D 219

HISTOLOGY AND EMBRYOLOGY

DEN 1114

PROF. MARIA-ELENA BILELLO



**Tooth Fusion** is when two tooth buds fuse together to make one tooth large wide crown. The fused tooth will have 2 independent pulp chambers and root canals.

# Causes

Fusion etiology is uncertain and maybe associated to genetic predisposition, racial differences and impact or trauma during tooth development.

- It can cause alteration in the number and shape of the affected teeth.

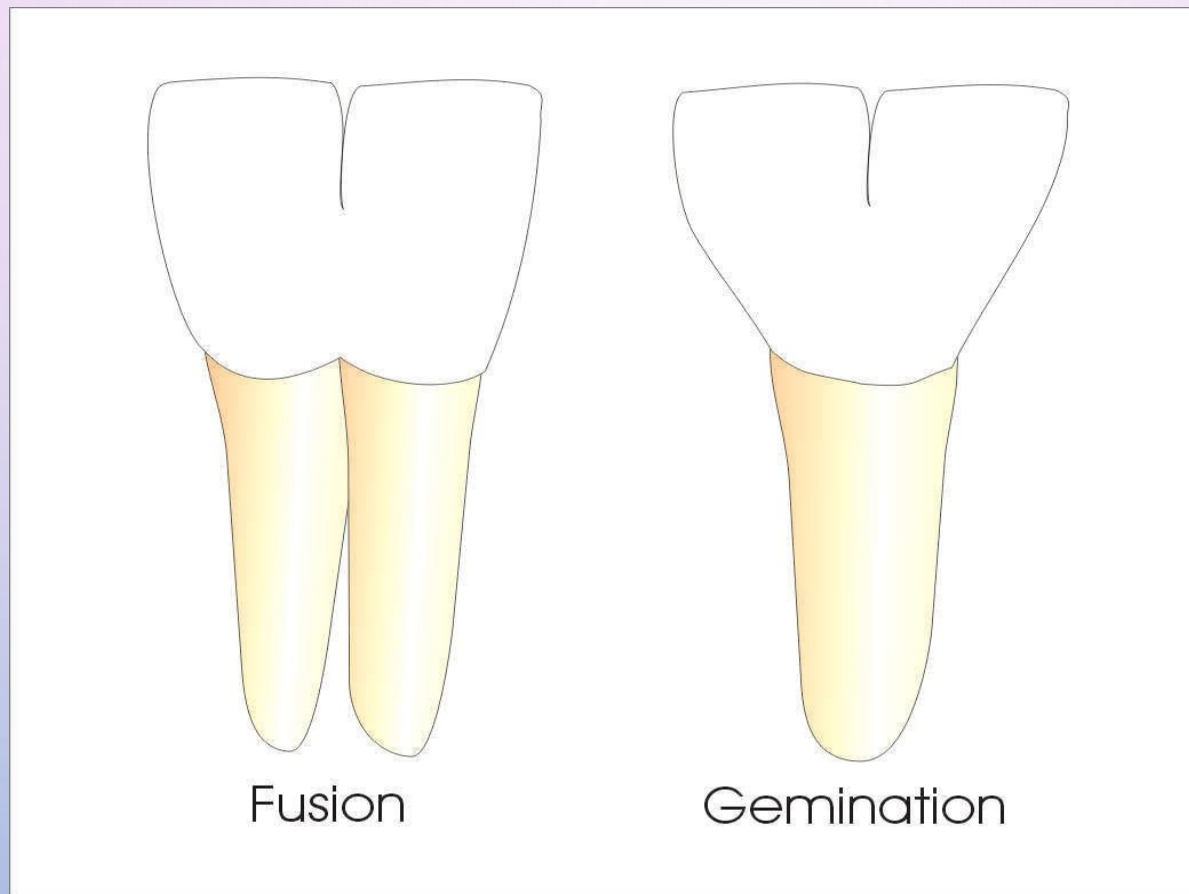
Children are the ones who are commonly affected by fusion.

It can occur in the primary and permanent dentition but is seen more often with the primary teeth.

It is commonly seen in the incisor area.



## Difference between Gemination and Fusion



They are two dental phenomena that are often confused with each other.

- In Fusion, your child seems to be missing one tooth.
- In Gemination, seems to have develop an extra tooth



Clinical appearance of fused tooth



Radiographic appearance

## **Several complications may occur due to fusion of the teeth:**

- Caries in the groove between the fused crowns leading to endodontic treatment.
- If not treated, it would result to tooth impaction, diastema and aesthetics.
- Periodontal problems which often demand a multi disciplinary treatment.

## **What can be done with a fused tooth?**



Fused tooth may exfoliate by itself and if it doesn't, the primary tooth needs to be extracted. Extraction of the fused permanent tooth is usually the normal course of orthodontic treatment. In rare cases, fused tooth could have the crown resized to an acceptable width. It is possible that a root canal would be needed to complete the procedure. If the width of the fused tooth is not very wide, then the tooth could be kept.

## **The Role of the Dental Team:**

Dentist should keep an eye for cavity development where the enamel comes together. Patient should be referred to a specialist for consultation.



## **Sources:**

<http://askanorthodontist.com/braces/what-is-tooth-fusion-gemination>

<https://www.ncbi.nlm.nih.gov/pubmed>

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