

Amelogenesis Imperfecta

By Michelle Ramirez



Amelogenesis Imperfecta

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What is *AMELOGENESIS IMPERFECTA*?

- (amelogenesis - enamel formation; imperfecta - imperfect)
- A disorder that affects the structure and appearance of the enamel of the teeth.
- This condition causes teeth to be unusually small, discolored, pitted or grooved, and prone to rapid wear and breakage with early tooth decay and loss.
- Can affect both primary teeth and permanent teeth. Teeth are also sensitive to either hot or cold exposures, and sometimes both. Severe and continuous pain due to exposed dentin in some cases.^{[1][2][3]}



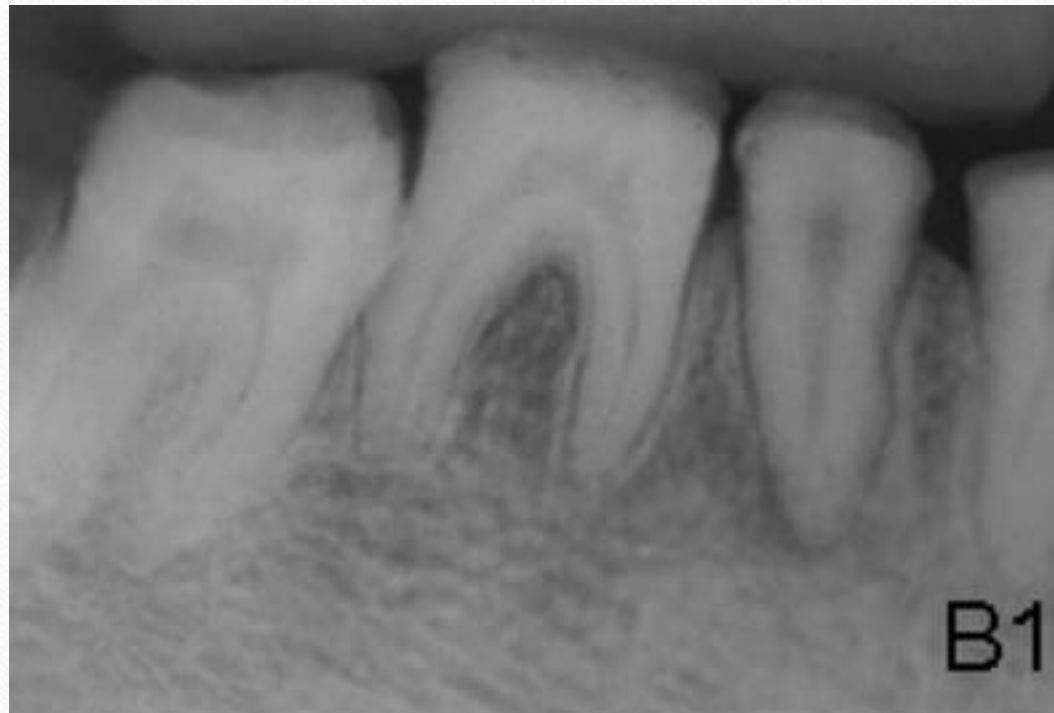
Subdivisions of Amelogenesis Imperfecta

- hypoplastic (type I)
- hypomaturation (type II)
- hypocalcified (type III)
- hypomaturation/hypoplasia/taurodontism (type IV)

Etiology

- Amelogenesis imperfecta is passed down through families as a dominant trait. That means you only need to get the abnormal gene from one parent in order to get the disease.
- In Amelogenesis Imperfecta, one or several of these genes is mutated, causing this condition to develop.
- The abnormal genes are inherited from either of the parents. Nonetheless, though the condition is generally passed on within the family, it can also occur randomly without any incidence of a positive family history.

X-ray showing lack of enamel opacity and a pathological loss of enamel in patient with Amelogenesis Imperfecta



Treatment

Preventive and restorative dental care for esthetic issues

- The main objectives of treatment is pain relief, preserving patient's remaining dentition, and to treat and preserve the patient's occlusal vertical height.^[16]
- Full-coverage crowns.
- Stainless steel crowns are used in children which may be replaced by porcelain once they reach adulthood.^[19]
- Aesthetics may be addressed via placement of composite or porcelain veneers. In the worst-case scenario, the teeth may have to be extracted and implants or dentures are required.

- BEFORE



- AFTER



ROLE OF THE HYGIENIST

- Without effective enamel, your **teeth** are prone to damage and breakage, as well as gingivitis or periodontitis and tooth decay. Therefore, people with this condition will have to practice stringent **oral hygiene** and it is our job to treat and educate them.
- Patients with this condition will most likely also suffer from sensitivity and will therefore require the hygienist to be extra careful when working on them.