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| **Name:** |
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| **Group:** |
| 8A-1 |
| **Pathology Question:** |
| What is the pathology of gemination and where is it seen? |
| **Report:** |
| Gemination is defined as two tooth buds from a single tooth germ that results in a the normal number of teeth with a shared root canal. This falls under the category of double teeth along with concresence and fusion. The main difference between these is that concrescence is joining of teeth by cementum, not the dentin, and fusion is joining of the teeth in the dentinal layer with two separately formed tooth buds with separate canals.  Not much is known about the exact process of how gemination arises in development, however, this generally thought to occur during the proliferative stage of tooth development during the ‘cap’ stage. While the tooth is forming, there is an attempt of the tooth to invaginate and divide itself, which it does partially or fully resulting in the proportional amount of crown attached. As for the prevalence, double tooth malformations happen more often in deciduous dentition (2.5%) than in permanent teeth (0.2%). As for which teeth are more often affected, double tooth occurs generally in the anterior dentition, while the maxillary anteriors more often see gemination and the mandiubular anteriors more often exhibit fusion. Although even more rare, it can occur in the posteriors as well.  |
| **References:** |
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