

Primary maxillary lateral incisor — Note: This is rare

The most common **congenitally missing permanent teeth** with the **exception** of the maxillary and mandibular third molars, are the mandibular second premolars, followed by the maxillary lateral incisors, and the maxillary second premolars.



1. The maxillary lateral incisor is most often **atypical in size** (*peg-shaped, etc.*).
2. A patient who has permanent central incisors, permanent canines, and primary canines anterior to the premolars most likely has **congenitally missing** permanent lateral incisors.

Heredity is **most frequently** responsible for the congenital absence of teeth. The roots of the primary tooth will resorb slower than normal without the presence of the permanent tooth. **As a general rule**, if only one tooth is or a few teeth are missing, the absent tooth will be the most distal tooth of any given type. If a molar tooth is congenitally missing, it is almost always the third molar. If an incisor is missing, it is nearly always the lateral. If a premolar is missing, it almost always is the second rather than the first. Rarely is a canine the only missing tooth.

Important: In the case of a **congenitally missing second premolar**, you want to hold onto the primary second molar as long as possible. If it is still present it may be **ankylosed**.

Note: Cessation of eruption (*tooth is out of occlusion*) is **most diagnostic** of an **ankylosed primary molar**.

Remember: **Space maintenance** is of utmost importance whenever primary or permanent teeth are congenitally missing or lost prematurely **which** results in the loss of arch integrity. The loss of space, arch length, perimeter, or circumference may result. Migration of primary and/or permanent teeth can occur and the available space may be reduced by an amount sufficient to cause some degree of crowding in the permanent dentition.

Replacement resorption, also known as ankylosis, results after irreversible injury to the periodontal ligament. Ankylosed primary teeth should be extracted **if they** cause a delay in or ectopic eruption of a developing permanent tooth.