Imagine life smiling...

COOKE ORTHODONTICS

Impacted Canines: Predicting and Preventing

PREVENTING:

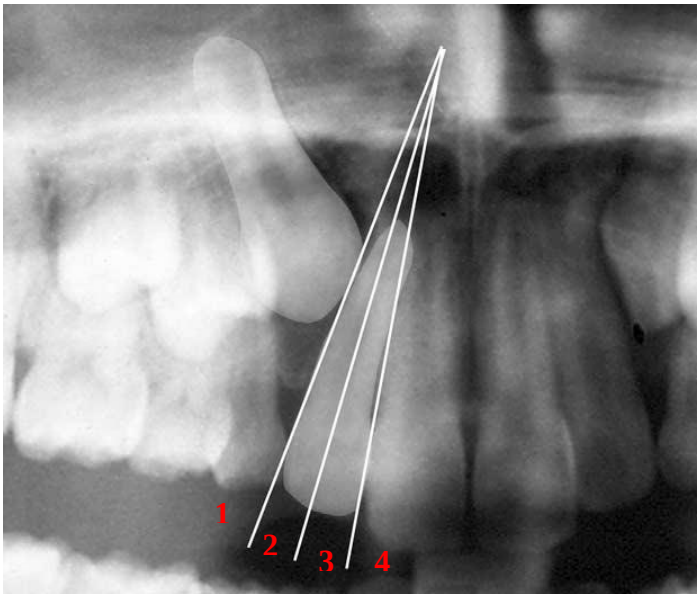
There are two approaches to help prevent impaction ("getting stuck") of canines. Both are done during phase 1, or early treatment. These two approaches are not mutually exclusive. Dr. Cooke may recommend both.

First, by expanding the arches when a child is young, Dr. Cooke creates space for the permanent teeth to erupt.* This movement would be much more difficult, and sometimes impossible to do later in physical development (after all of the adult teeth have grown in). We usually use a "Hyrax" expander or "Schwartz" expander. **Second,** the baby canines may need to be extracted early. This will create a clear channel to encourage the adult canine tooth to erupt.**

Early treatment also helps in preventing excessive enamel wear on other adult teeth that may be taking on more force to make-up for the impacted canines.

PREDICTING:

Many times an adult canine will appear crowded or very 'tilted' on the x-ray you see – This diagram explains how Dr. Cooke determines which patients are at such a high risk of impacted teeth that early intervention is necessary. *Determine which vector* (numbered 1-4) *the cusp tip of the canine is located in a panoramic radiograph.*



Likelihood the canine will become impacted with respect to vector location:

Vector 1: 6% chance
Vector 2: 38% chance
Vector 3: 87% chance
Vector 4: 99% chance

* Baccetti et al. Interceptive treatment of palatal impaction of maxillary canines with rapid maxillary expansion: A randomized clinical trial. Am J Orthod Dentofacial Orthop 2009;136:657-61.
**Warford et al. Prediction of maxillary canine impaction using sectors and angular measurement. Am J Orthod Dentofacial Orthop 2003;124:651-55.