Dr Mehran Hossaini on Sam’s case:

I have to admit, I admire the effort to catalog all these events!!! I am not sure if I would been that interested to research this so extensively.

From my perspective, the first question should be the prognosis of this tooth and why it is not erupting.  It seems like everyone more or less has done what they had to do.  I won't pretend to understand the cellular pathophysiology of  Intra-coronal resorption in unerupted canine.  So I cannot intelligently comment if this is a really entity or not.  So, before putting this kid through more intervention we should identify our treatment objectives.

If we don't think this tooth can be guided into position, then might as well leave alone.  If we don't understand the etiology or cellular pathophysiology of the problem, then I am not sure if endo or restorative treatment would fix it.  From the technical perspective, usually gaining access to these teeth is difficult enough, add to it restorative or endodontic procedures!?  I know I personally would not be able to gain such an access to this tooth.

If we think this tooth can be guided into position, then why not perform the endodontic and restorative procedures more predictably at a later time?

Anyway, sorry if I cannot provide an intelligent answer.

Dr Jeffrey Janian on Sam’s case:

Regarding the “resorption” of the unerupted #6:  This includes resorption of the enamel of the crown.  I have no explanation for it.

The crown of the tooth is fully formed before any root formation occurs, so I highly doubt the original trauma affected the crown of tooth #6.  The shape of the “resorbed” incisal portion of #6 appears like an artificial geometric shape, rather than a process the body creates.

I can’t say whether this is resorption or not.

Following the mother’s description of the timeline and the radiographs provided, the way I read it, the only surgical/dental intervention before the “missing incisal portion” of the crown was:   extraction of the primary canines.

Could a bur have had contact with the incisal edge of #6 removing the primary canines?  I can’t imagine this being the case, but I’ve never removed a tooth such as this or even seen it done.

Regarding: **Pre-eruptive intracoronal resorption**

I’ve never been exposed to this term.  Never read it in a textbook or attended a presentation it was spoken of.  Due to this I expect is a little know entity.  (and I wasn’t sure how much more research/knowledge there is besides the case report.

Most importantly, there is nothing which can be done endodontically unless the canine is exposed.  The pulp appears to be functioning properly, as the root has continued to develop.  The pulp must be present, viable and healthy for the root to continue development.

So in summary, I’m not sure this is resorption.  If it is, its something I’ve never heard of, where enamel is resorbed.  Next, if anything endodontically needs to be done.  (I’m not convinced of this), the tooth must be exposed, which seems may not be possible.  (?)

As a disclaimer, I’ve not examined the patient;  this is only my opinion with the knowledge I have;  resorption of the enamel of a tooth is not within my area of expertise;  and I’ve learned not to be surprised there are issues out there I just am not aware of.

I extend the mother and son the best hope possible.

Jeff