PRESENTATION OF THE CASE

Mr B, aged 16, with no particular prior history, consulted us about the unsightly positioning of his upper right canine, which had begun to trouble him (fig. 1 a).

His family dentist had suggested that no action be taken and the tooth simply observed because there seemed to be enough space for it in the arch in spite of slight mesiopositioning of the lateral sectors (fig. 1 b, 1 c).

But the patient was in despair: for two years the tooth had not budged. He asked for immediate orthodontic treatment.
DESCRIPTION OF THE RADIOGRAPHIC FILE

These two two panoramic films taken at the time of diagnosis and during multi-attachment treatment (in negative mode for better visibility), show a complete dentition with no notable anomalies.

No anatomical obstacles could be seen, nor were surface cemental alterations that might suggest resorption and possible ankylosis. Percussion tests were normal. On the other hand, tooth roots seemed longer than normal, especially the root of the upper right canine, which was almost 35 mm in length. Its apex, which appeared still to be open, lay beyond the hard palate over the intersinus nasal septum.

We brought the canine into position in 4 months with orthodontic traction and it now seems to be completing its normal eruption.

WHAT WAS THE DIAGNOSIS? WHAT ACTION SHOULD BE TAKEN AND WHAT ARE THE POSSIBLE EFFECTS ON ORTHODONTIC TREATMENT?

Rhizomegaly or radiculomegaly, the phenomenon of extremely long-rooted teeth, is rare. It affects the canines, both maxillary or mandibular, in particular. Observers describe the dental eruption of these teeth being both slow and delayed, and the formation of their apices as "obscure".

This morphological anomaly, only sparsely reported in the literature, has been linked to other pathological conditions included in the oculo-facio-cardio-dental syndrome: congenital cataract, microphthalmia, cardiac malformations, cleft palate and other dental anomalies such as dilacerations and agenesis. In several case reports, where no major deformities were present and only minor orthodontic movement was required, non-extraction treatment proceeded normally. In this case of the impatient patient, we treated the Class II asymmetrical deviation with intermaxillary elastic bands on a thermoformed mandibular splint.
When teeth with excessively long roots require root canal treatment, endodontists may have to make special adjustments to their instruments and to their techniques to cope with special situations.

FURTHER READING