Pulp sensitivity test have always been helpful in determining clinically the reactivity of the pulp, but how reliable are them? How determinant are them in defining the endodontic treatment? We know that, in order to have a proper diagnosis of the pulpal health, the only way is a histologic exam, which precisely defines the degree of impairment. The real question is: which is the correlation between the histologic level of pathology and the clinical answer to the tests?
This second lower molar is a typical example of what we are wondering: the radiological and the clinical exam (where also a fistula track was made) the pulp is evidently necrotic and the lesion is of endodontic origin.
When opening the pulp chamber we see a hyperemic and bleeding pulp that evidently answers to any thermal and mechanical stimulation. At this point, one could have a doubt on the nature of the lesion, thinking that it could be periodontal instead of endodontic.
this would be a big mistake, because the lesion is exclusively endodontic, as we can see by the radiological healing, that can be seen at the 6-months recall.
If, in this case, we would have based our diagnosis only on the pulpal answer to the vitality test, the mistake would have been evident. It must be understood that, above all in multi-rooted teeth, we can often find in the canals pulpal areas with different groups of pathologies. Consequently, we can have totally necrotic zones alternated with pulpitic or hyperemic areas that, besides having important signs of bleeding, will answer positively to the vitality test, making the clinical situation more confused and bringing the dentist to an error.
Necrotic lower molar

MB canal with pulp tissue vital
An example where only part of the pulp tissue is still vital, this is very common in multi rooted teeth and it's one of the reasons because the pulp testing can give us a questionable results.


