



**PATRÍCIA
FERNANDES DDS**

ENDODONTICS DEPARTMENT
MALO CLINIC

DENTAL MEDICINE

NEW TECHNOLOGIES IN ENDODONTICS

What is root canal treatment and what is it for?

The endodontic treatment consists of cleaning, disinfecting and filling the root canals and is the treatment of last resort as an alternative to extraction. Its success depends on the maintenance of the dental piece and is the only possible treatment following the development of irreversible pulpal entities (necrosis or pulpitis) that have developed either by caries, trauma or periodontal disease.

What has changed?

The success rate has greatly increased in recent years due to the great evolution in endodontics, both in the development of new apparatus and materials and instrumentation techniques. We highlight some of them:

The apical locator is a device that allows us to know, with great rigor, the length of the root and thus to clean the entire canal avoiding future problems. Increasingly modern and accurate, apical locators become mandatory in endodontic practice.

Digital radiography is another great aid in the efficiency of endodontics, because besides allowing a faster image acquisition, it still has the advantage of reducing the amount of radiation required in each exam. We can also count on the help of CBCT (Cone-Beam Computed Tomography) that allows us to have a better knowledge about radicular anatomy with less radiation than conventional tomography.

In the matter of solving difficult cases, we can count on the help of the operating microscope. Thanks to the possibility of great enlargement and illumination, this device has become fundamental in the resolution of complications such as the investigation of accessory canals, calcification, removal of fractured instruments, treatment of resorptions or perforations. In addition, it allows us to document cases with beautiful photographs and videos used to explain the patient or to train new professionals.

Substantial changes have also occurred in the instrumentation materials of the canals making them more resistant and capable of more standardized treatments. Thus allowing an increase of the maintenance of the teeth in their perfect function as well as their longevity with health.