

Here there is an example of how it is possible today to carry out, with the necessary skills, volumetric examinations (cbct) with an acceptable diagnostic quality and an absolutely contained limited irradiation.

The examination in annex cone beam computed tomography (cbct) highlights all the diagnostic information necessary for correct treatment planning, and data relating to exposure and radiation factors, expressed directly by the cbct machine in d.a.p. (Dose area product).

This d.a.p. is particularly low even compared to a traditional two-dimensional examination, orthopantomography (opt). In fact in the annex, below, we have an opt with a dap of 114 mGy cm<sup>2</sup> (given on the top left of the image opt) and a cbct dedicated and optimized for diagnostic purposes with 74 mGy cm<sup>2</sup>. With a lower absorbed dose we get better and more diagnostic information.

OPT

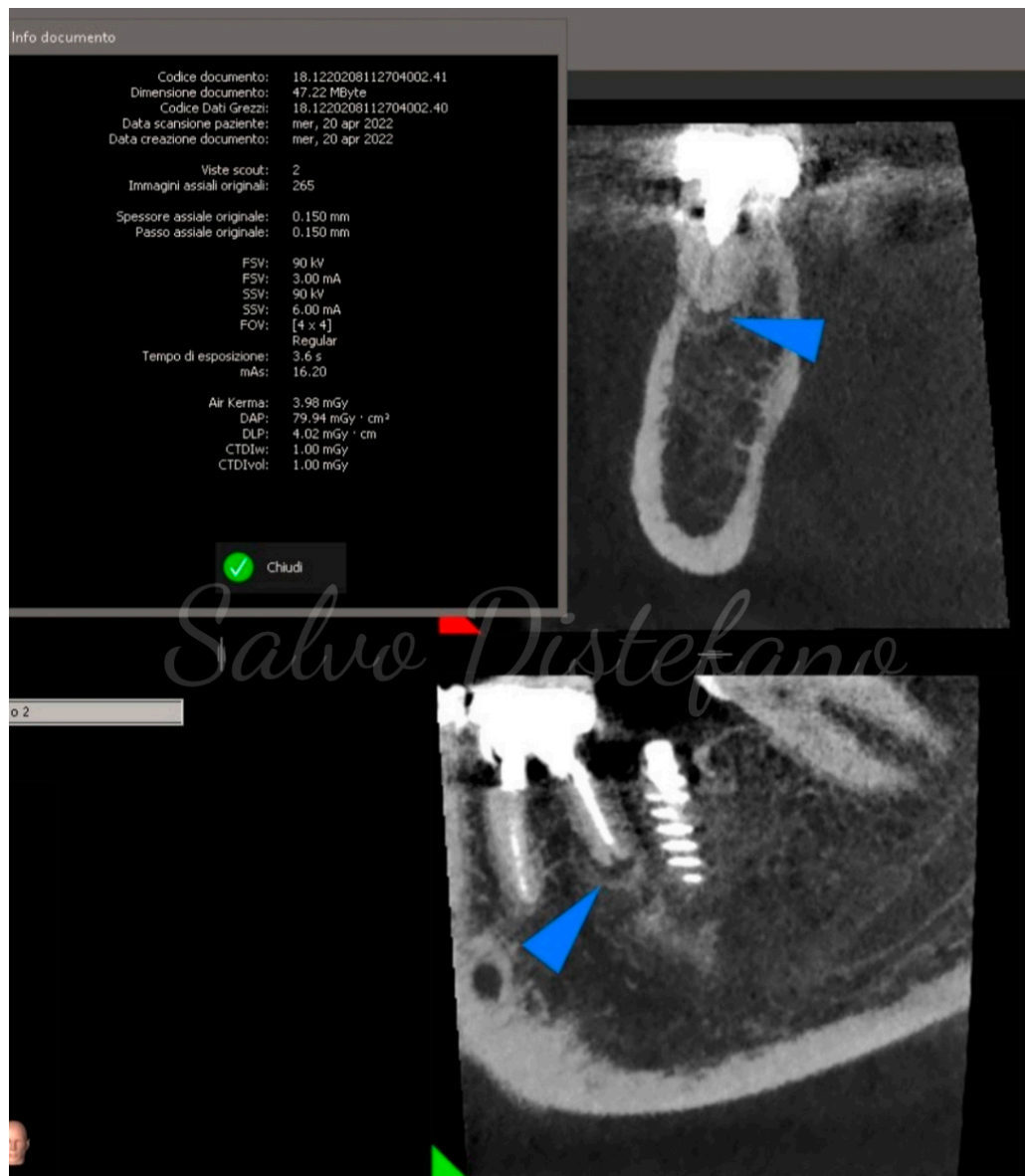


Small endodontic anatomical structures, such as The presence of a "forgotten" channel in the distal root of the first lower molar, are evident in the axial and sagittal plane, in the images below (cbct) despite the low dose from volumetric examination. (not visible with traditional 2d exams).

In addition, the image quality is acceptable, compared to the dose and the diagnostic task, despite the presence of metals (implant) and channeling filling, which usually determine image artifacts.



CBCT



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