

# The CT Scan

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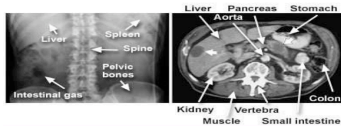
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The CT scan, also known as the CAT scan, stands for Computerized Axial Tomography. This is an X-ray technique that produces images of your body that visualize internal structures in cross section rather than the overlapping images typically produced by conventional X-ray exams. Tomography is from the Greek word “tomos” meaning “slice” or “section” and “graphia” meaning “describing.”

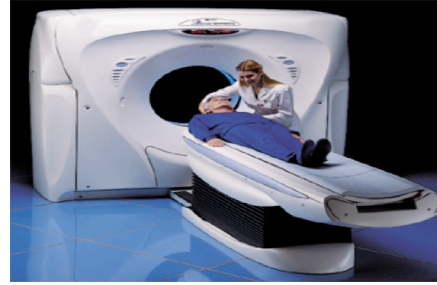
In the 1930's an Italian radiologist named Alessandro Vallebona proposed a method to represent a single slice of the body on the radiographic film. This exam was known as tomography. Computerized tomography was later invented in 1972 by British engineer Godfrey Hounsfield and physician Allan Cormack. Hounsfield and Cormack were awarded the Nobel Peace Prize for their contributions to medicine and science.

The first clinic CT scanners were installed between 1974 and 1976. The original systems were dedicated to head imaging only, but “whole body” systems with larger patient openings became available in 1976. CT became widely available by about 1980. There are now about 6,000 CT scanners installed in the U.S. and about 30,000 installed worldwide.

CT scans work by using an X-ray unit that rotates around your body and a powerful computer collects the data. The result is a set of cross-sectional images, like slices, of the inside of your body. This allows doctors to see multidimensional images of your body.



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During its twenty-five year history, CT has made great improvements in speed, patient comfort, and resolution. Therefore, more anatomy can be scanned in less time. Faster scanning helps to eliminate defects from patient motion such as breathing or peristalsis. This provides excellent image quality for diagnostic confidence at the lowest possible x-ray dose.

Like most procedures done in the medical field, the pros and cons have to be weighed out. CT scan risks are similar to those of conventional X-rays. During the CT scan, you're briefly exposed to radiation. But doctors and other scientists believe that CT scans provide enough valuable information to outweigh the associated risks.

## Works Cited

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