

Search life-sciences literature

[Advanced search](#) | [Recent history](#)

CT Scan

Patel PR ¹, De Jesus O ²

Author information

Study Guide from **StatPearls Publishing**, Treasure Island (FL), 02 Jan 2023

PMID: 33620865

Books & documents



Free full text in Europe PMC

Share this article    

Abstract

A computed tomography (CT) scan, commonly referred to as a CT, is a radiological imaging study. The machine was developed by physicist Allan MacLeod Cormack and electrical engineer Godfrey Hounsfield. Their development awarded them the Nobel Prize in Physiology or Medicine in 1979. The first scanners were installed in 1974. Since then, technological advances and math have allowed single images to be computed into two-dimensional informative images. The CT scan is essentially an x-ray study, where a series of rays are rotated around a specified body part, and computer-generated cross-sectional images are produced. The advantage of these tomographic images compared to

This website requires cookies, and the limited processing of your personal data in order to function. By using the site you are agreeing to this as outlined in our [privacy notice and cookie policy](#).

[I agree, dismiss this banner](#)

continuously as the x-ray source and detectors rotate. This reduces the duration of the study significantly to provide quick results in emergent situations. It rapidly substituted cerebral angiography for detecting head trauma injuries and brain masses in a fast and extremely reliable way. A radiologic technician acquires CT scans, which are interpreted and reported by a trained radiologist.

[Free full text](#)

[Citations & impact](#)

[Similar Articles](#)

To arrive at the top five similar articles we use a word-weighted algorithm to compare words from the Title and Abstract of each citation.

Follow us



[News blog](#)



[Technical blog](#)



[Twitter](#)



[YouTube](#)

Partnerships & funding

Europe PMC is developed by [EMBL-EBI](#) with support from the [Europe PMC Funders' Group](#), in collaboration with the [National Library of Medicine \(NLM\)](#), as part of the [PubMed Central International](#) archive network.



Europe PMC is an [ELIXIR Core Data Resource](#), [Global Core Biodata Resource](#), and conforms

with EMBL-EBI's long term data preservation policies.