



Volume 1, Issue 1, 2024

Intuitions & Insights

An Interdisciplinary Research Journal



X-Ray: A boon to medical diagnosis

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Abstract: X-ray is a variant of electromagnetic wave. Owing to its high frequency, it possesses high energy enabling it to penetrate through metals, body tissues etc. Almost since its discovery, X-rays had been used in imaging of bone structure in photographic film (X-ray plate) which later have been processed digitally. Use of artificial intelligence has made it possible to construct 3-D radiographic image from a series of 2-D images. Computed Tomography or CT Scan combines X-rays and computer to create cross-sectional picture of different body parts from different angles and different positions. Greater image resolution in CT has paved the way of development of new investigations like CT angiography, virtual colonography etc. Dose of X-rays is scaled down now-a-days to minimize its hazardous effects caused by over exposure to X-rays in CT scanning. For its huge usefulness in medical diagnosis , 8th November (day of discovery of X-rays) is celebrated as ‘World Radiography Day’ worldwide.

Keywords: X-ray, Radiography, Computed Tomography, Medical Diagnosis.

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Received: 07.09.2023; **Accepted:** 29.01.2024; **Published:** 03.04.2024