# Abstract

Computed tomography is one of the most valuable tools used in modern health care centers. must use tomography carefully to protect patients from radiation. This study aims to evaluation the quality of image and radiation dose, for 64- 8 slices CT. A random sampling consisted of 8 patients who underwent CT examinations are prepared for the brain. Information was recorded for patients as age, sex and exposure factors (kv- mA). Data has been taken from the Royal Care Hospital and Antalya Medical Center (Khartoum _Sudan).

The study found that the CT 64-slice has a high image quality and the patient is exposed to a high dose of radiation compared with the 8 slices CT it has lower-quality image and the patient is exposed to a high dose sometimes.