Radiation is energy that comes from a source and travels through space at the speed of light.There exists the potential for direct interaction with crucial cellular targets.Alternatively, radiation may interact with other cellular atoms or molecules, notably water, generating free radicals capable of diffusing to reach and impair critical targets, known as the indirect action of radiation[3].Cosmic sources like the sun and outer space contribute to radiation exposure, as well as terrestrial radiation from elements like radon gas, uranium, and thorium in the Earth's crust.In medical settings, ionizing radiation is used for diagnostic purposes, with X-rays and CT scans being essential in medical imaging procedures.However, the biological ramifications of radiation primarily stem from damage inflicted upon deoxyribonucleic acid (DNA), which serves as the primary focus for any type of radiation--whether it be x-rays, ?-rays, or charged or uncharged particles--once it is absorbed into biological matter.This energy has an electric field and a magnetic field associated with it and has wave-like properties The types of radiation and their effects vary depending on their energy and origin, and they are classified into two main categories: non-ionizing radiation and ionizing radiation.