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**Study the effects of exposure to different doses of X-ray on some blood rheological properties****Nourhan I.Ghoneim***International Maritime College Oman, Sultanate of Oman, Maritime Department, Oman*

Radiotherapy is widely used in a variety of medical applications because of its potential drawbacks. The purpose of this paper was to investigate the biological effects from a clinical therapeutic 6 MV linear accelerator facility at faculty of Medicine, Alexandria University-Egypt. Blood was selected as the biomarker for assessing the risk associated with exposures to X-rays at different doses because it is a vital system for human life. Five main groups of male albino rats were studied "namely group A, B, C, D, and E" and blood samples were collected from each animal at 3days and 9 days post exposure. Biomechanical osmotic fragility and rheological and power law model studies were carried out for different blood samples. Results of 3 days post exposed blood samples indicated significant changes in blood osmofragility and remarkable increase in viscosity coefficient at different shear rates with lower rheological flow index. Results of 9 days post exposed blood samples indicated changes in blood fragility and remarkable decrease in viscosity coefficient at different shear rates with higher rheological flow index.

**Biography**

Nourhan I.Ghoneim Acting Head of Maritime Department - International Maritime College Oman (IMCO), Working as an Assistant Professor at International Maritime College Oman (IMCO), Maritime Department. PhD Degree, Master Degree and University Degree (B.Sc) in marine engineering and naval architecture department.

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