ABSTRACT
Diagnostic radiation still one of the most important way in the diagnosis of several diseases, in spite of
the possible passive effects of their product radiations. In order to test the hypothesis that radiations may
perturb in the body functions (that including the function of nervous, sexual, immune and gastrointestinal
tract systems) of the handlers in diagnostic radiation field, the present study was designed to
determination of oxidative stress parameters (MDA and NO as a lipid peroxidation agents, and SOD in
addition to CP levels, as protective agents against lipid peroxidation) in addition to cortisol level as a
reflection parameters to the bearable effect in sera of 25 workers in Al- Sadder Medical City, and 30
non work controls. Elevation of MDA NO and cortisol levels were recorded (p<0.005, p<0.05, and
p<0.05; respectively) in sera sample of workers in the diagnostic radiation fields, on the other hand,
significant decreases (p<0.005 and p<0.001; respectively)in levels of antioxidation parameters CP and
SOD. Current work can present a simple and sensitive tool to evaluate the radiations effect in this field
workers, oxidation and oxidation parameters can illustrate a good imagination about the workers health.
This work can be applied in other fields which recorded radiance activities, in addition to that it can
develop to involve estimation of several oxidative stress and antioxidation parameters and compare their
results to present work.

Keywords: Radiation, Oxidative stress, Cortisol, Trace elements, Handlers.