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Clinical Image

A Novel and Modern Experimental Approach to Vibrational Circular Dichroism Spectroscopy and Video Spectroscopy Comparative Study on Malignant and Benign Human Cancer Cells and Tissues with the Passage of Time under White and Monochromatic Synchrotron Radiation

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Introduction

In the current study, we have experimentally and comparatively investigated and compared malignant human cancer cells and tissues before and after irradiating of white and monochromatic synchrotron radiation using Vibrational Circular Dichroism

Spectroscopy and Video Spectroscopy, respectively. It is clear that malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under white and monochromatic synchrotron radiation with the passage of time (Figures 1-4) [1-108].

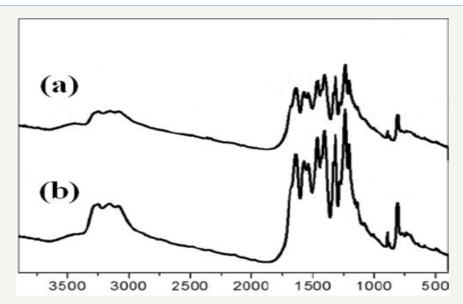


Figure 1: Vibrational Circular Dichroism Spectroscopy analysis of malignant human cancer cells and tissues (a) before and (b) after irradiating of white synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-108].

It can be concluded that malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under white and monochromatic synchrotron radiation with the passage of time (Figures 1-4) [1-108].

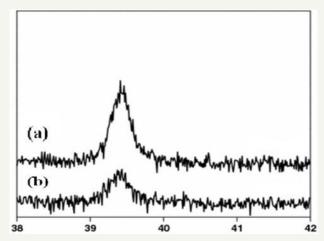


Figure 2: Video Spectroscopy analysis of malignant human cancer cells and tissues (a) before and (b) after irradiating of white synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1–108].

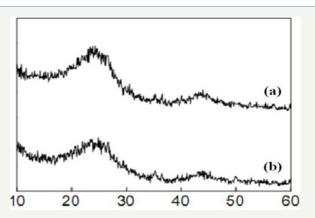


Figure 3: Vibrational Circular Dichroism Spectroscopy analysis of malignant human cancer cells and tissues (a) before and (b) after irradiating of monochromatic synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-108].

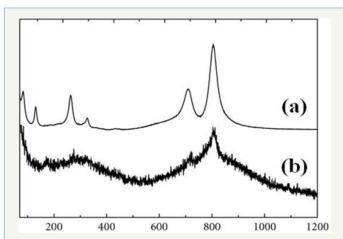


Figure 4: Video Spectroscopy analysis of malignant human cancer cells and tissues (a) before and (b) after irradiating of monochromatic synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-108].

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