OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Functional and Comparative Genomics & Pharmacogenomics

November 12-14, 2013 DoubleTree by Hilton Hotel Chicago-North Shore, IL, USA

Chitinase-3-like protein1 (YKL-40) as biomarker in serum of Egyptian breast cancer females

Zeiad Gad
Cairo University, Egypt

Background & Aim: YKL-40 is a recently discovered human glycoprotein which is related in amino acid sequence to the chitinase protein family, but has no chitinase activity, its expression was shown to be highly expressed in breast cancer, in this study we aim to detect level of YKL-40 in metastatic and non-metastatic breast cancer patients and to compare the results with fibroadenoma patients and normal females.

Patients & Methods: 78 female patients were enrolled in this study and they are divided into 17 patients with fibroadenoma, 43 non-metastatic & 18 metastatic patient. Ten healthy females were also included and served as control. YKL-40 level is detected in serum of studied groups using ELISA kit provided from Quantikine R&D systems, Minneapolis, USA.

Results: There is statistical significant difference regarding YKL-40 level between the control group versus non-metastatic group as well as metastatic group, and between fibroadenoma group and non-metastatic as well as metastatic breast cancer group ($P<0.001$ each). Also there is high statistical significant difference between N1, N2 and N3 in non-metastatic group as well as between N2 and N3 in metastatic group (each<0.001).

Conclusion: We concluded that there is significantly elevated serum YKL-40 level in breast carcinoma compared to women with benign breast tumors and healthy controls.

Biography

Zeiad Gad has completed his M.B.B.ch from Cairo University, Egypt and now he is a postgraduate student in the laparoscopic unit of the Surgical Oncology Department, National Cancer Institute, Cairo University. He has published more than 8 papers in reputed journals.

omleila2@yahoo.com