



Feasibility study of ALK rearranged gene mutation among Upper Egypt Non-Small Cell Lung Cancer patients and Impact on survival, does ethnic origin differ?" ALK rearranged gene in non-small cell lung cancer Upper Egypt patients

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Abstract:

We aimed to study the prevalence of ALK rearranged gene mutation and its correlation with survival in a sample of upper Egypt NSCLC patients. Twenty-six patients with advanced NSCLC, The sample included 21 males and 5 females, 8 presented with pleural effusion, 10 liver metastases, and 4 with brain metastases. 14 patients had adenocarcinoma, 6 squamous cell carcinoma and 6 had undifferentiated carcinoma. ALK gene rearrangement testing was performed by FISH in Tissue Sections using Vysis LSI ALK Break Apart Rearrangement Probe. ALK rearrangement were conducted using imaging system and software (Leica, Germany). ALK gene rearrangement was positive in 15 patients through a follow up for 63 months. All patients received chemotherapy with difference in objective response rate (ORR), ALK +ve cohort 73.3% (PR:3, SD:8) and ALK -ve cohort 100% (PR:6, SD:5). Two -year progression free survival rate and the overall survival rate were 68.8% & 51.6% respectively. Univariate analysis was conducted between ALK +ve / ALK -ve for different risk groups (site of metastasis, histologic subtype, grade, gender and age). Patients with adenocarcinoma appeared to have better overall survival rate compared to patients with squamous cell carcinoma $p = (0.07)$, while no identified significant difference for other factors has been noted.

Biography:

Eman Mosad has completed her MD at the age of 30 years from Assiut University-Egypt and postdoctoral studies from Assiut University -South Egypt Cancer Institute. He is the director of cytogenetic lab,. He has published more than 35 papers in reputed journals .

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