



Beclin-1 Expression is a Predictor of Clinical Outcome in Patients with Serous Ovarian Carcinoma and Correlated to Hypoxia-Inducible Factor (HIF)-1 α Expression

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Abstract:

In the present study, we examined the relationship between Beclin-1 expression and HIF-1 α expression in 60 cases of serous ovarian carcinoma (SOC) using immunohistochemistry. We followed our patients for 3 years, analyzed the relationship between markers expression, clinic-pathological criteria and the prognosis of patients. the expression of Beclin-1 in SOC was significantly negatively correlated with advanced age of the patients ($p=0.003$), higher grade ($p=0.002$) & advanced stage of the tumor, presence of distant metastases ($p<0.001$), peritoneal implants ($p=0.006$), L.N metastases ($p=0.004$), bilaterality ($p=0.03$) and ascites ($p=.005$), the expression of HIF-1 α in SOC was significantly positively correlated with advanced age of the patients ($p=0.002$), higher grade of the tumor, presence of peritoneal implants ($p=0.006$), advanced stage of the tumor ($p=0.007$), presence of distant metastases ($p=0.012$), peritoneal implants ($p=0.044$), L.N metastases ($p<0.001$), and presence of ascites ($p=.036$). High Beclin-1 and Low HIF-1 α expression were strongly correlated with better response to

therapy ($p=0.047$ & 0.022 respectively), increased Chemosensitivity of the tumor ($p=0.043$ & 0.036 respectively), low incidence of recurrence after therapy ($p=0.006$ & <0.001 respectively), increased the liability of optimal surgical eradication of the tumor, increased 3-year recurrence free overall survival rates ($P <0.001$). Beclin-1 expression was negatively correlated with HIF-1 α expression r correlation coefficient = -0.762 ($p<0.001$). Beclin-1 is a marker of good prognosis, while HIF-1 α is a marker of poor prognosis in SOC.

Biography:

Dr Ola A. Harb has completed her PhD from Zagazig University, Zagazig, Egypt. He is the Head of the department of Pathology, Faculty of medicine. He has published more than 30 papers in reputed journals and has been attend more than 20 conferences as a speaker