Research Journal of Oncology

Extended Abstract
Vol. 2, Iss. 3
2018

Clinical Oncology 2018: Pseudo-relapse and cancer stem cells in ovarian cancer - Martin Orlando Rosas Delgado - Sonora Cancer Research Center (CICS Sonora), Mexico

Martin Orlando Rosas Delgado
Sonora Cancer Research Center (CICS Sonora), Mexico

Background: Little information exists about the early, middle and late image effects after antigen-specific multi-peptide immunotherapy and immunomodulation in epithelial ovarian cancer. Most of the potential effects in pseudo-progression and pseudo-relapse are mainly unknown for the oncologists and radiologists, specifically in the follow up by images such as CT scan and PET scan after immune interventions are mainly unexplored clinically. We studied 30 high-grade serous carcinomas. We selected two relevant clinical image methods to demonstrate that immune infiltration attacking biologically, and clinically relevant proteins involved in cancer stem cells and prognosis produce atypical images in patients with pseudo-progression and in patients with pseudo-relapse after successful immune based treatment. We demonstrated that patients treated with this approach have atypical images. We found by PET scan bright images, multiple lymphadenopathies and necrosis nests after treatment compatible with better prognosis.

Methods: 30 PET scans and CT scans were analyzed for number of enlarged lymph nodes, lesions brightness size and were analyzed by four operators. Moreover, we analyzed by Granzyme B ELISPOT the immune response against predicted Th1 and CD8 epitopes from the bad prognosis proteins during, before and after treatment. We performed univariate and multivariate analysis for clinical correlations.

Results: 100% of the patients showed the same pattern in the PET and CT scan by meaning of multiple lymphadenopathies and bright areas in the previously occult microscopic cancer stem cells. We found the eight bad prognosis proteins were overexpressed in colon and upper GI tract as following RCAS1(90%), Fascin-1 (76%), EGFR (60%), VCP (85%), Ape-1 (90%) and Sox2 (48 %). We found after treatment a media expression of CD8 cells of 40%.

Discussion: Epithelial ovarian cancer is highly infiltrated by CD8 cells that induce bright color on the lesions by Pet and CT scan and we need to validate this data to have the proof of principle and avoid over treatment in epithelial ovarian cancer and importantly learn to distinguish true active malignant tumor lesions from immune infiltration that usually is misinterpreted by radiologists and some oncologist.

This work is partly presented at 2nd Edition of International Conference on Clinical Oncology and Molecular Diagnostics, June 11- 13, 2018 held at Dublin, Ireland