Novel immunotherapy for non Hodgkin lymphoma using vaccine of cancer cells with anti-IL-19 antibodies

Manal Mohamed Saber
Minia University, Egypt

Background: Non-Hodgkin's lymphoma (NHL) is a group of lymph proliferative malignant disorders with heterogeneous histological and clinical features. Higher IL-19 serum levels were associated with treatment failure and relapse in NHL. Despite major advances in treatment, a proportion of patient relapses highlighting the need for new immunotherapy.

Objective: To develop a novel cancer vaccine expressing anti-IL-19 mAbs in NHL

Methods: The antitumour effect of the vaccine was verified by therapeutic animal experiments *in vivo*. The antitumour mechanism was analysed using flow cytometry, immunohistochemistry, immunofluorescence, ELISA and T-lymphocytes assays.

Results: Novel cancer vaccine inhibited tumour growth and extended the survival of the mice compared to vaccine-untreated group. A strong T cell response by more CD4-positive T cells, CD8-positive T cells, NK cells and tregs appeared in the vaccine-treated group. Accompanying the antitumor responses, there were increases in IFN-γ and IL-12. Furthermore, novel cancer vaccine decreased the tumour-induced apoptosis of T cells.

Conclusion: This study has demonstrated a novel promising cancer vaccine in tumour immunotherapy.

Speaker Biography

Manal Mohamed Saber has completed her PhD from Nottingham University. She is an Associate Professor of Clinical Pathology, Minia University, Egypt. She has published papers in peer reviewed journals and has been serving as an Editorial Board Member of others.

e: Manal.Saber@mu.edu.eg

Notes: