OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference and Exhibition on
Nutritional Science & Therapy

July 15-17, 2013 Courtyard by Marriott Philadelphia Downtown, Philadelphia, USA

Observational comparative study on the effect of intravenous omega 3 fatty acids (Omegaven) on quality of life and nutritional status of patients with advanced cancer

Jamal Zidan, Sigalit Tamam, Yhudit Sher, Amira Abzah and Shlomit Yohay
Oncology Institute, Ziv Medical Center, Israel

Abstract

Purpose: The importance of nutrition support in cancer patients is in consensus. Cancer cachexia is a syndrome characterized by progressive involuntary weight loss. Clinical features include host tissue wasting, anorexia, skeletal muscle atrophy, fatigue, anemia, and hypoalbuminemia. Calories rich diets are not enough to help cancer cachexia patients to raise a weight and to improve their quality of life. Several studies found omega 3 fatty acids helpful in stabilizing weight or decrease the rate of weight loss in advanced cancer patients. The aim of this study is to evaluate the efficacy of intravenous (IV) omega 3 fatty acids (omegaven. Fresenius Kabi) on quality of life and weight of patients with advanced and metastatic malignancies.

Methods: Fifty patients with advanced cancer were given omegaven IV once every one week. Omegaven includes 10 gr highly refined fish oil, 1.25-2.82 gr eicosapentaenoic acid, 1.44-3 gr docosahexaenoic acid and other acids in 100 ml emulsion given by IV infusion. Total energy in one infusion is 470 kJ/100 ml=112 kcal/100ml. Some patients received only omegaven and others received omegaven and chemotherapy sequentially. Characteristics of patients with omegaven were compared with their characteristics before administration of omegaven and with a control group not receiving omigaven.

Results: Average duration of treatment was 11 weeks (range: 3-24 weeks). 15 patients in control group who did not receive omegaven had 4.1 kg weight loss during this period. Patients in the omegaven group had lost 4.19 kg of their weight before omegaven, while they had increased weight by an average of 2.24 kg after omegaven ($p=0.02$). Performance status had increased from 50% before omegaven to 60% after omegaven. Total protein levels increased by 0.34 mg in average after omegaven and albumin by 0.24 mg compared to baseline levels before omegaven ($p=0.04$). 80% of patients reported on improvement of their quality of life after 4-4 weeks of omegaven. No side effects were documented.

Summary: Intravenous omigaven increased significantly weight, performance status, proteins and quality of life in advanced cancer patients. No side effects were reported. Omegaven given IV given seems safe and effective in cancer cachexia patients.

Biography

Jamal Zidan earned his doctorate in medicine (MD) at the Semmelweis University in Budapest, Hungary. He has finished his specialization in Oncology at the Oncology Department at Rambam Medical Center in Haifa, Israel. Since 2007, he is a Professor at the Faculty of Medicine at the Technion University in Haifa, Israel. At 2009, he was a Visiting Scientist in Biological Regulation Department in Weizmann Institute of Science, Rehovot. Israel. Since October 2011, he is a Professor at the Faculty of Medicine in the Galilee, Safed, Bar-Ilan University, Israel. He is the head of Oncology Institute at Ziv Medical Center, Safed, Israel and is a member of several international organizations like ESMO, ASCO and others. Prof. Zidan has over 170 publications. He has received many honors as: "Eminent Scientist & Outstanding Scholar of the Year 2001", International award of IRPC; International Research Promotion Council Asia-Pacific Chapter, World Scientists Forum International Award, Gold Medal. His main research interest is molecular biomarkers, targeting therapy and other clinical issues in cancer.