

2nd International Congress on**EPIGENETICS & CHROMATIN**

November 06-08, 2017 | Frankfurt, Germany

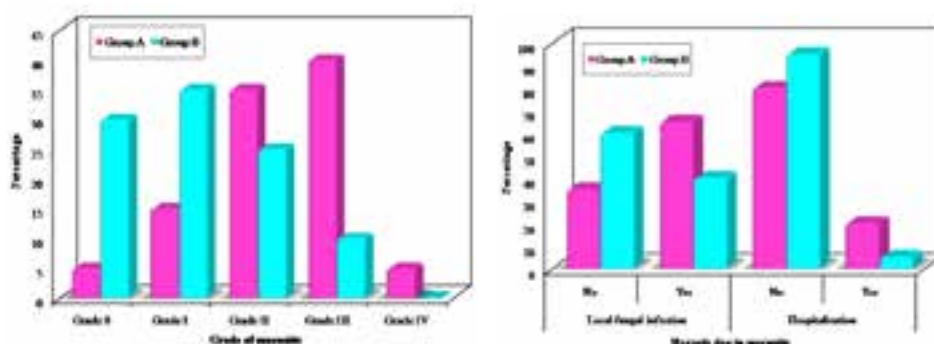
The preventive role of intravenous L-alanyl L-glutamine in reducing the incidence of oral mucositis in head and neck cancer patients receiving radiotherapy with or without chemotherapyNesreen Mohamed Sabry Afifi Mattar, Amany M El Feky and Ashraf O Barakat
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Statement of the Problem: Patients with H&N cancer who receive RTH with or without chemotherapy complain always from mucositis this study is a prospective comparative phase 2 aimed to assess the role of intravenous L-alanyl L-Glutamine in reducing the rate of oral mucositis for squamous head and neck cancer patients receiving radiotherapy with or without concurrent chemotherapy.

Methodology& Theoretical Orientation: From September 2014 to September 2016, 100 H&N cancer patients were treated with radiotherapy or combined chemo-radiation at our oncology department. Patients were randomized in 1:1 ratio into group A (n=50 patients) treated by radiotherapy or concurrent chemo-radiotherapy and group B (n=50 patients) to receive same treatment in addition to intravenous glutamine. The investigational drug was infused daily at dose of 0.3-0.4 g/kg diluted in NS and administered at rate of 0.1 g/Kg/hr. All patients received total dose of 65-70 Gy using LINAC 6 MV photon beam supplemented with electron beam when needed. For concurrent chemotherapy, cisplatin (40 mg/m²) was administered weekly. Mucositis was assessed by WHO grading system.

Results: A significantly higher incidence of mucositis was reported in 46% of group A compared with 10% in group B. Group B had significantly longer period free from mucositis in comparison to group A with median time (12 weeks vs. 8 weeks). A significant lower rate of radiotherapy interruption was reported in group B compared to group A (50% vs. 14%). More Patients needed hospitalization in group A (20%) vs. (5%) in group B. No adverse effects were observed in relation to glutamine.

Conclusion & Significance: IV L-alanyl L-Glutamine may be an effective measure to lower incidence or prevention of oral mucositis in H&N cancer patients treated by RTH or combined chemo RTH.

**Recent Publication**

1. Papanikolopoulou A, Syrigos KN and Nikolaos Drakoulis (2015) The role of glutamine supplementation in thoracic and upper aerodigestive malignancies. *Nutrition and Cancer*. 67(2):231-237.
2. Gul K, Muge A, Taner A, et al (2015) Oral glutamine supplementation reduces radiotherapy- induced esophagitis in lung cancer patients. *Asian Pac J Cancer Prev*. 16(1):53-58.
3. Tsujimoto T, Yamamoto Y, Wasa M, et al (2015) L-glutamine decreases the severity of mucositis induced by chemoradiotherapy in patients with locally advanced head and neck cancer: a double-blind, randomized, placebo-controlled trial. *Oncol Rep*. 33(1):33-39.

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4. Chattopadhyay S, Saha A, Azam M, et al (2014) Role of oral glutamine in alleviation and prevention of radiation-induced oral mucositis South Asian Journal of Cancer 3(1):8-12
5. Tutanc OD, Aydogan A, Akkucuk S, et al (2013) The efficacy of oral glutamine in prevention of acute radiotherapy-induced esophagitis in patients with lung cancer. Contemporary Oncology (Poznan) 17(6):520-524.

Biography

Nesreen Mohamed Sabry Afifi Mattar is working as a Lecturer of Clinical Oncology at Tanta University Hospital. She also works as a Consultant in insurance hospital. She has an experience in teaching postgraduate students. She completed her Master's degree on the topic "Comparative study between chemoradiation and surgery in bladder cancer" and: MD on the topic "Comparative study between RCHOP and CHOP in DLBC NHL according to biomarker mutation (bcl2, p53)". Recently, she has published a paper on "The role of lapatinib in combination with letrozole in postmenopausal breast cancer women".

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