Paclitaxel and Carboplatin in Elderly Patients with Advanced Non-Small Cell Lung Cancer

Yaşlı İleri Evre Küçük Hücreli Dışı Akciğer Kanserli Hastalarda Paklitaksel ve Karboplatin

Chemotherapy in Elderly Lung Cancer Patients

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To the editor:

We read the article named "Paclitaxel and Carboplatin in Elderly Patıents with Advanced Non-Small Cell Lung Cancer" by Ozdemir et al. with great interests [1]. We appreciate the authors for their study which is aimed to investigate the safety and tolerability of paclitaxel and carboplatin (PC) regimen in elderly patients with advanced non-small cell lung cancer (NSCLC). In our opinion, author pointed an interesting subject. The article contributes science, as well. The study has shown that PC regimen may be a good alternative for the treatment of elderly patients with advanced NSCLC. However, they mentioned that most of the patients have suffered some chemotherapy based side effect and the most frequent side effect observed was grade 3 or 4 neutropenia (57.7%) [1]. Overcome this issue, we would like to comment on some issues regarding the results of their study and draw further attention.

Lung Cancer is most common killer cancer and the second most common cancer in both men and women in the worldwide, has a limited 5-year survival of only 16 % [2]. Approximately half of the patients with lung cancer have metastatic disease when they are diagnosed. Thoracic radiotherapy using photon (X-ray) radiotherapy (XRT) is usually used for locally advanced NSCLC patients as a part of multimodality standard therapy combining with chemotherapy. However, toxicities and adverse effects such as radiation pneumonitis are very common and these effects limit the treatment efficacy [2]. In contrast to XRT, the protons are accelerated sufficiently to penetrate into tissue only to the depth of the cancer target, so that, proton beam therapy (PBT) might theoretically provide a superior dose distribution to target lesion and safer than XRT and systemic chemotherapy [3]. The clinical results of proton therapy in lung cancer patients reveal relatively low rates of toxicity and possible survival benefits [4]. But there is only six proton therapy center in the world for now. Accessibility is the limitation of the proton therapy. In our clinic, we apply this therapy and also have some ongoing project about potential benefits by using PET/CT imaging. We may affix the recent study that PBT is a safe and effective procedure, with promising oncological and functional results, and could be a valid alternative in selected cases. We celebrate Ozdemir et al and offer our respect for their valuable presentations.

References

1. Kanat A, Çubukcu E, Çubukcu S, Aksoy S, Canhoroz M, Karadağ O, Alkış N, Manavoğlu O. Paclitaxel and Carboplatin in Elderly Patıents with Advanced Non-Small Cell Lung Cancer. J Clin Anal Med 2012;3(3): 293-5
2. Simone CB 2nd, Rengan R. The use of proton therapy in the treatment of lung cancers. Cancer J 2014;20(6):427-32
3. Lee CH, Tait D, Nahum AE, Webb S. Comparison of proton therapy and conformal X-ray therapy in non-small cell lung cancer (NSCLC). Br J Radiol 1999;72:1078–84.
4. Nichols RC, Huh SN, Henderson RH, Mendenhall NP, Flampouri S, Li Z, D'Agostino HJ, Cury JD, Pham DC, Hoppe BS. Proton Radiation Therapy Offers Reduced Normal Lung and Bone Marrow Exposure for Patients Receiving Dose-Escalated Radiation Therapy for Unresectable Stage III Non-Small- Cell Lung Cancer: A Dosimetric Study. Clin Lung Cancer. 2011 Jul;12(4):252-7

DOI: 10.4328/JCAM.3572 Received: 02.05.2015 Accepted: 03.05.2015 Printed: 01.02.2016
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