Commentary

The new front line in advanced nasopharyngeal cancer

Kiattisa Sommat, Joseph T. S. Wee

Department of Radiation Oncology, National Cancer Centre Singapore, Singapore

Correspondence to: Kiattisa Sommat. Department of Radiation Oncology, National Cancer Centre Singapore, Singapore. Email: kiattisa.sommat@singhealth.com.sg; Joseph T. S. Wee. Department of Radiation Oncology, National Cancer Centre Singapore, Singapore. Email: joseph.wee.t.s@singhealth.com.sg.

Comment on: Zhang L, Huang Y, Hong S, *et al*. Gemcitabine plus cisplatin versus fluorouracil plus cisplatin in recurrent or metastatic nasopharyngeal carcinoma: a multicentre, randomised, open-label, phase 3 trial. Lancet 2016;388:1883-92.

Received: 30 November 2016; Accepted: 19 December 2016; Published: 21 January 2017.

doi: 10.21037/jxym.2017.01.09

View this article at: http://dx.doi.org/10.21037/jxym.2017.01.09

In reference to the article by Zhang *et al*. (1), we would like to congratulate the authors for reporting the first randomized controlled trial in the recurrent/metastatic nasopharyngeal cancer (NPC) setting. This study compares two widely used cisplatin containing doublet chemotherapy regimens and covers a great gap in the management of patients with metastatic or recurrent NPC. The results from this study with progression free survival (PFS) being the primary endpoint established the superiority of gemcitabine over infusional 5FU as the companion to the cisplatin backbone.

The combination of cisplatin and infusional 5FU, developed by Wayne State University for the treatment of head and neck squamous cell carcinoma (2), showed similar activity and efficacy in NPC and was widely adopted as the standard regime in NPC for many years. However, the need for in-patient administration as well as complications associated with central venous access devices has prompted the search for outpatient and bolus administration of platinum-based doublet regimens with comparable toxicities. Gemcitabine is a desirable agent, because it may be administered as a short intravenous infusion in the outpatient setting and avoids the inconveniences of infusional 5FU. Furthermore, it has also demonstrated activity and efficacy as a single agent or in combination with platinum in metastatic or recurrent NPC, with overall response rate reported in the range of 28–73% (3-5).

In this study, the authors reported an improvement in median PFS, amongst other clinical endpoints, with cisplatin/gemcitabine (7.0 versus 5.6 months, P<0.0001), and preliminary analysis suggested this might translate into meaning improvement in overall survival (29.1 versus 20.9 months, P=0.0025). Furthermore, the convenience of administration of cisplatin/gemcitabine in the outpatient setting makes it advantageous in terms of logistics and patient convenience.

Finally, it is worth mentioning that the cisplatin/gemcitabine group experienced more grade 3 and above hematologic toxicities than those treated with cisplatin/5FU (neutropenia 23% versus 13%, P=0.0251; thrombocytopenia 13% versus 2%, P=0.0007). In contrast, patients in the cisplatin/5FU group experienced a greater incidence of grade 3 and above mucositis (15% versus 0%, P<0.0001). Nevertheless, the incidence of serious adverse events attributed to treatment was low and similar between the two groups (4% versus 6%). The proportions of other nonhematologic toxicities were otherwise identical in the two treatment groups.

Beyond doubt, this study provides needed data about the optimal chemotherapy regime in the first line treatment of recurrence/metastatic NPC. Current research is focused not only on developing novel agents such as immunotherapy, but also on identifying potential predictors of treatment benefit, with earlier integration of molecular markers into NPC trials. Further prospective clinical trials, evaluating different treatment strategies are warranted to improve patients' outcome and minimize toxicity of treatment.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned and reviewed by the Section Editor Wei Zhang, MD (Department of Clinical Pharmacology, Xiangya Hospital, Central South University, Changsha, China) and Assistant Editor Rong Liu, MD (Department of Clinical Pharmacology, Xiangya Hospital, Central South University, Changsha, China).

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/jxym.2017.01.09). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

doi: 10.21037/jxym.2017.01.09
Cite this article as: Sommat K, Wee JT. The new front line in advanced nasopharyngeal cancer. J Xiangya Med 2017;2:6.

References

1. Zhang L, Huang Y, Hong S, et al. Gemcitabine plus cisplatin versus fluorouracil plus cisplatin in recurrent or metastatic nasopharyngeal carcinoma: a multicentre, randomised, open-label, phase 3 trial. Lancet 2016;388:1883-92.
2. Kish J, Drelichman A, Jacobs J, et al. Clinical trial of cisplatin and 5-FU infusion as initial treatment for advanced squamous cell carcinoma of the head and neck. Cancer Treat Rep 1982;66:471-4.
3. Foo KF, Tan EH, Leong SS, et al. Gemcitabine in metastatic nasopharyngeal carcinoma of the undifferentiated type. Ann Oncol 2002;13:150-6.
4. Ma BB, Tannock IF, Pond GR, et al. Chemotherapy with gemcitabine-containing regimens for locally recurrent or metastatic nasopharyngeal carcinoma. Cancer 2002;95:2516-23.
5. Ngan RK, Yiu HH, Lau WH, et al. Combination gemcitabine and cisplatin chemotherapy for metastatic or recurrent nasopharyngeal carcinoma: report of a phase II study. Ann Oncol 2002;13:1252-8.