Dear Editor,

We have read with great interest the article by Piagkou et al where the authors evaluated precisely the functional anatomy of the Mandibular Nerve and the consequences of nerve injury and entrapment, distinguishing transection, crush injuries and compression as different pathologic models. In a relevant study, Eleftheriadis et al, reported two cases of male children with head and neck cancer treated with chemoradiotherapy, who presented complications like growth deficiency of middle face, mandible hypoplasia and dental abnormalities.

Several questions are arising concerning the radiation therapy in young patients with head and neck cancer and the pathologic model of nerves harm occurrence. It is surely worth of clinical research to clarify whether radiation therapy causes direct injury of the nerves or entrapment after edema and which is the pathologic mechanism of this procedure. Eleftheriadis et al, reported that there was correlation of nerves harm and the severity of developmental disorders with the age. Maybe there is a different model of pathologic degeneration according to age and the elucidation of this area would help to the better prevention in this cohort of patients. Michalski et al, and Dahllof et al, report that the lower harmful radiation dose is probably 1800-2000 rads. Although the newly developed anatomical structures are extremely radiosensitive and there are harmful consequences of the normal development after radiation therapy. The definition of the maximum radiation tolerable dose for nerves and furthermore the correlation with age through clinical trials would be advantageous for the medical society giving the necessary information for better prevention.

Considering the above, we suggest the pediatric oncology/pathology is a new area for prevention as well as for the management of developmental disorders in young patients with head and neck cancer. We would be grateful to receive any comments or opinions in respect to these considerations.

References

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