"Evaluation of the efficacy of adjuvant radiotherapy versus chemoradiotherapy in patients with salivary gland tumors"

Dear Editor,

We were intrigued by the research conducted by Aral *et al*., which compared the effectiveness of adjuvant radiotherapy (RT) and concurrent chemo-RT (CCRT) in patients with salivary gland tumors (SGTs).[1] A total of 47 patients were analyzed retrospectively: 34 with RT and 13 with CRT, with no meaningful difference between them regarding acute toxicity, disease-free survival (DFS), or overall survival (OS) outcomes. Notwithstanding the authors' contribution to the literature on the SGT, it is imperative to address two crucial considerations before drawing appropriate inferences from the reported results.

First, the study's authors found no difference in acute toxicity rates despite RT doses between 52 and 70 Gy, regardless of the chemotherapy status. These findings are surprising because both RT dosage and concurrent chemotherapy are known factors that can increase acute and late toxicity rates.[2,3] In addition, the authors did not evaluate late side effects, which often have more significant impacts on all aspects of the patient's life quality than generally self-limiting acute side effects. This is despite a median follow-up time of 60 months (range: 6–160 months), which is sufficient to evaluate late toxicity in all 47 patients. For example, even with the use of intensity-modulated RT, the majority of the components of the masticatory apparatus should have been exposed to sufficiently high doses to cause radiation-induced trismus, a notable long-term consequence of RT that affects up to 20% of these patients.[4] Hence, although the authors acknowledged that late toxicity data was missing, it is critical to conduct meticulous patient follow-ups to measure and record late toxicity types and grades, which is equally significant as survival results in establishing the success of any cancer therapy.

Second, unfortunately, the authors improperly compared all baseline and treatment features [original Table 1]. For example, the authors indicated that T4 tumors represented 60% and 40% of the RT and CCRT groups, but the precise T4 distributions should be 35.3% (12/34) and 61.5% (8/13) for the RT and CCRT groups, respectively. It is imperative to exhibit the distribution of any factor in each subgroup separately and perform intergroup comparisons rather than distributing it as a percentage of the total number of cases with the tested factor in the whole research cohort. This is critical since actual T-stage rates favor the RT group, implying that adding chemotherapy may mitigate the effect of poor prognosticators and equalize survival rates between the two treatment groups, which may be the scenario in this study.[1] In addition, the event level should be ≥50% to obtain a median survival value from the Kaplan–Meier curve. However, based on the data presented in Figures 1 and 2 of the original publication, both DFS and OS still need to reach their respective medians, contrasting with the claimed 48 and 58.5 months, respectively. Another unfortunate statistical error is that the DFS rates in Figure 1 are all superior to the OS rates in Figure 2, which is statistically impossible.[5] Hence, the authors need to rectify these statistical errors to ensure accurate statistical reporting.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Erkan Topkan, Efsun Somay[1]

Department of Radiation Oncology, Faculty of Medicine, Baskent University, Adana, [1]Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Baskent University, Ankara, Turkey

For correspondence:
Dr. Efsun Somay,
Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Baskent University, 82. Street No: 26 Bahcelievler, Ankara, Turkey.
E-mail: efsuner@gmail.com

Submitted: 27-Jan-2024
Accepted in revised form: 13-Jun-2024
Published: 19-Sep-2024

REFERENCES

1. Aral İP, İnan GA, Gökçe E, Gani Z, Ergün D, Arslan N, *et al*. Evaluation of the efficacy of adjuvant radiotherapy versus chemoradiotherapy in patients with salivary gland tumors. J Cancer Res Ther 2024. doi: 10.4103/jcrt.jcrt_2739_22.
2. Adelstein DJ, Li Y, Adams GL, Wagner H Jr, Kish JA, Ensley JF, *et al*. An intergroup phase III comparison of standard radiation therapy and two schedules of concurrent chemoradiotherapy in patients with unresectable squamous cell head and neck cancer. J Clin Oncol 2003;21:92-8.
3. Tao Y, Auperin A, Sire C, Martin L, Khoury C, Maingon P, *et al*. Improved outcome by adding concurrent chemotherapy to cetuximab and

radiotherapy for locally advanced head and neck carcinomas: Results of the GORTEC 2007-01 phase III randomized trial. J Clin Oncol 2018;36:3084-92.
4. Somay E, Yilmaz B, Topkan E, Kucuk A, Pehlivan B, Selek U. Initial neutrophil-to-lymphocyte ratio predicts radiation-induced trismus in parotid gland cancer. Oral Dis 2023;29:2772-9.
5. Clark TG, Bradburn MJ, Love SB, Altman DG. Survival analysis part I: Basic concepts and first analyses. Br J Cancer 2003;89:232-8.

Access this article online	
Website: https://journals.lww.com/cancerjournal	**Quick Response Code:**
DOI: 10.4103/jcrt.jcrt_216_24	

Cite this article as: Topkan E, Somay E. "Evaluation of the efficacy of adjuvant radiotherapy versus chemoradiotherapy in patients with salivary gland tumors." J Can Res Ther 2024;20:1662-3.