

Combined chemoradiation for head and neck region myxofibrosarcoma of the maxillary sinus

Domenico Cante¹, Pierfrancesco Franco², Piera Sciacero¹, Giuseppe Franco Girelli¹, Valeria Casanova Borca³, Massimo Pasquino³, Santi Tofani³, Sebastiano Bombaci⁴, Fernanda Migliaccio², Annamaria Marra¹, Gianmauro Numico⁵, Maria Rosa La Porta¹, and Umberto Ricardi⁶

¹Department of Radiation Oncology, ²Department of Medical Physics, and ⁴Department of Medical Oncology, ASL TO4, Ospedale Civile di Ivrea, Ivrea; ³Radiation Oncology Department, Tomotherapy Unit, and ⁵Medical Oncology Department, Ospedale Regionale U Parini, AUSL Valle d'Aosta, Aosta; ⁶Department of Medical and Surgical Sciences, Radiation Oncology Unit, University of Turin, Ospedale San Giovanni Battista, Turin, Italy

ABSTRACT

Aims and background. Adult sarcomas of the head and neck region (HNSs) are considered a rare clinicopathological entity. They account for only 2-15% of all adult sarcomas and for less than 1% of all head and neck malignancies. The preferred initial treatment option is wide surgical excision. Whenever surgery is considered infeasible, a frontline combined-modality approach including radiotherapy and chemotherapy might be proposed. We here report on a case of localized sarcoma of the maxillary sinus treated with induction chemotherapy and subsequent intensity-modulated radiation therapy (IMRT), achieving a persistent complete remission status.

Methods. A 66-year-old man was referred to our institution hospital for left-sided facial pain with swollen left cheek and ipsilateral facial palsy. Magnetic resonance imaging showed a mass within the left maxillary sinus extending to the orbital floor and adjacent alveolar bones. Histological examination of the biopsy specimen demonstrated a myxofibrosarcoma. The patient underwent induction chemotherapy with gemcitabine 900 mg/m² (days 1-8) and taxotere 80 mg/m² every 3 weeks for 3 cycles and sequential simultaneous integrated boost (SIB) IMRT up to a total dose of 70 Gy/35 fractions to the macroscopic disease with 59.5 Gy/35 fractions to the level IB-II lymph nodes in the left neck.

Results. Treatment was well tolerated with mild acute toxicity. Complete remission was achieved at restaging MRI 6 months after the end of the combined modality approach. The patient remains in complete, unmaintained clinical and instrumental complete remission 18 months after treatment, with no late side effects.

Conclusion. Combination therapy with induction chemotherapy and sequential SIB-IMRT could therefore be a promising modality for head and neck sarcomas, allowing for simultaneous tumor control and normal tissue sparing.

Key words: head and neck sarcoma, myxofibrosarcoma, radiotherapy, combined modality, IMRT, chemotherapy.

Disclosure: The authors disclose no conflicts of interest.

Correspondence to: Domenico Cante, MD, Radiation Oncology Department, ASL TO4, Ivrea Community Hospital, Piazza Credenza 2, 10015 Ivrea (TO), Italy.

Tel +39-0125-414239;
fax +39-0125-414834;
email domecante@yahoo.it

Received March 12, 2012;
accepted June 4, 2012