ABSTRACT

Background: Low-dose rate brachytherapy is a well-established treatment modality of oral cancer. Data about high-dose rate (HDR) brachytherapy are still sparse with various fractionation schedules and heterogeneous results.

Aim: The aim of our retrospective study was to evaluate the results of HDR brachytherapy with doses of 3 Gy twice daily.

Patients and methods: Twenty patients with squamous cell tongue cancer were treated in the years 2001–2009 by exclusive HDR BT 18 × 3 Gy twice daily. The plastic tube technique was used. Median follow up was 47 months (7.8–118) since brachytherapy.

Results: The local and locoregional control was 85% and 68%, respectively. Bone necrosis developed in one case treated without mandibular shielding and soft tissue necrosis in 2 cases.

Conclusion: It can be concluded that HDR brachytherapy with 18 × 3 Gy twice daily is safe with promising local control. The risk of nodal recurrences is substantial.

Keywords: Oral cancer; High-dose rate brachytherapy