

F-18 FDG PET/CT imaging in the Ameloblastoma Follow Up

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Keywords

Ameloblastoma
FDG PET/CT
Treatment response

Abstract

Ameloblastoma is a benign odontogenic tumor that originate from dental region (1). Previous reports have determined the F-18 FDG PET/CT findings of this tumor (1) and this is the first case with follow up results in the literature as far as we know.

Research Article

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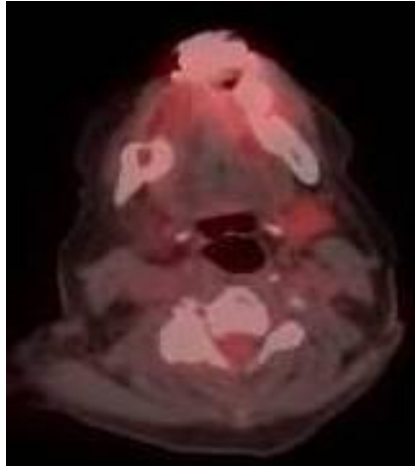


Figure 1a. Sixty-seven years old female patient with the diagnosis of right mandibular Ameloblastoma was referred for F-18 FDG PET/CT with suspicion of recurrence. F-18 FDG PET/CT imaging was performed to the patient with previous starvation of 10 hours while the blood glucose level was 109 mg/dl by administration of intravenous 9.6 mCi FDG with 3 minutes per bed time in craniocaudal direction. The imaging revealed recurrent tumor at right mandible with FDG accumulation (SUVmax=4.49).

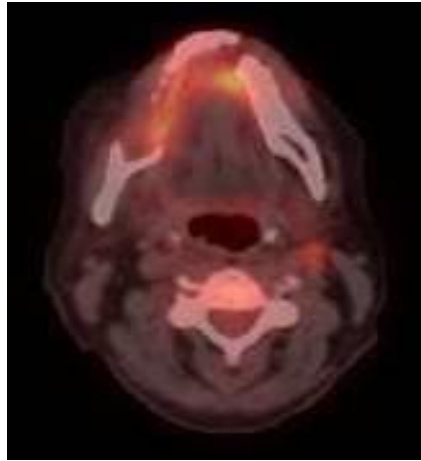


Figure 1b. The patient was subjected to 75 mg/m² Cisplatin and 50 mg/m² Adriamisin treatment and after 6 cycles of treatment the decrease of the FDG accumulation in the tumor was observed.

Discussion

Ameloblastoma which is a benign tumor unfortunately can invade surrounding structures and can be recurrent (1). Furthermore, malignant version 'Ameloblastic carcinoma' might metastasize to lymph node and distant sites (1). There are limited number of case reports in the literature about the F-18 FDG PET/CT findings of these tumors (2, 3). There has been a case report with F-18 FDG PET/BT showing distant metastasis of Ameloblastic carcinoma at staging (3, 4). Otsuru et al. demonstrated that the recurrent Ameloblastoma might be determined by F-18 FDG PET/CT (5). This case report demonstrated that the diagnosis of recurrence as well as treatment follow up might be performed by F-18 FDG PET/CT in Ameloblastoma. This imaging modality might be helpful in Ameloblastoma as well as Ameloblastic carcinoma diagnosis, staging and follow up. This is the first case in the literature with follow up F-18 FDG PET/CT findings of Ameloblastoma.

Conflict of Interest

No conflict of interest was declared by the authors.

Author Contributions

Concept: Z.P.K.; Design: Z.P.K., G.Y.; Supervision: Z.P.K., P.P.O., E.S.; Funding: Z.P.K., P.P.O.; Data Collection and/or Processing: Z.P.K., P.P.O., E.S.; Analysis and/or Interpretation: Z.P.K.; Literature Review: Z.P.K.; Writer: Z.P.K., G.Y.

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