High uptake of FDG in the sites of wisdom tooth extraction

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Abstract

It is known from clinical experience that when PET is performed in the oral cavity region, FDG is sometimes taken up in sites where cancer tissue is unlikely to be present. Recently, during postoperative follow-up of tongue cancer, we observed high uptake of FDG in the sites of wisdom tooth extraction performed 6 months earlier. The lateral borders of tongue cancers are frequently in contact with dental sockets and teeth; therefore, if FDG uptake is increased at the site of tooth extraction, PET images can lead to an over diagnosis of the extent of the primary lesion. Even if the patient becomes tumor-free after treatment, FDG PET may give a false-positive result. Thus, we consider that in PET diagnosis in the oral cavity region, fusion with morphological images of CT/MRI is important.