Dual Phase Change of F-18 FDG Uptake in Oncocytic Schneiderian Papilloma on PET Imaging: A Case Report

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ABSTRACT

A female aged seventy-eight presented an incidental sinonasal tumor with FDG avidity when undergoing FDG PET/CT. Intense tumor FDG uptake initially but obviously decreased on delayed/postprandial imaging was noticed. After surgery, the pathological diagnosis is oncocytic Schneiderian papilloma (OSP). To our knowledge only three cases with OSP demonstrated by FDG PET/CT have been published in the English literature previously and such rare benign tumors unexceptionally showed high FDG uptake. However our observation of the bi-phase change of accumulation of FDG in OSP has never been reported, herein we describe an OSP manifesting as a slow-growing tumor expressing rapid decline from extremely high lesional FDG avidity.

1. Introduction

Schneiderian papilloma (SP) is a rare benign sinonasal neoplasm, representing 0.4 ~ 4.7% of all tumors that occur in the nasal cavity or nasal sinuses [1]. SPs arise from the Schneiderian membrane, which is named after German anatomist, Conrad Viktor Schneider (1,614 ~ 1,680), who characterizes the sinonasal mucosa and identifies its origin as ectodermally derived ciliated columnar epithelium. Schneiderian papillomas have been histomorphologically classified as inverted papilloma (IP), everted papilloma (EP) and oncocytic Schneiderian papilloma (OSP). OSP is the rarest subtypes of SP and has been previously known as cylindrical cell papilloma and, in the majority