



Nuclear Medicine

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Services

Parotid Tumor

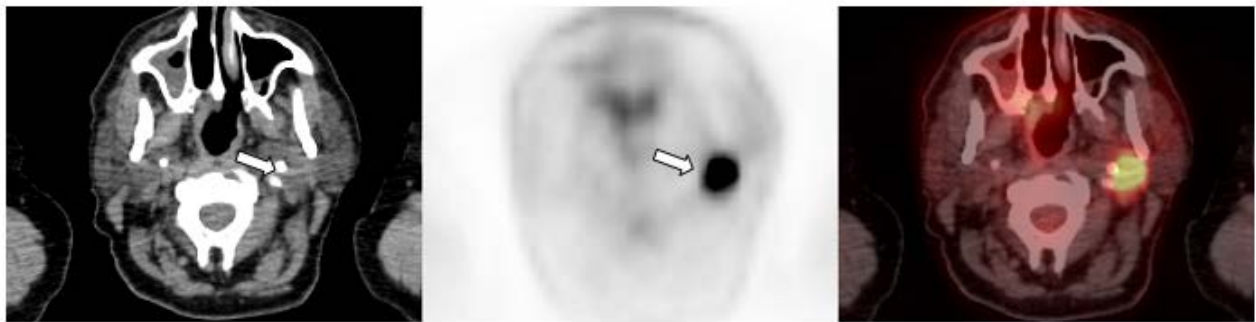


Fig. 1

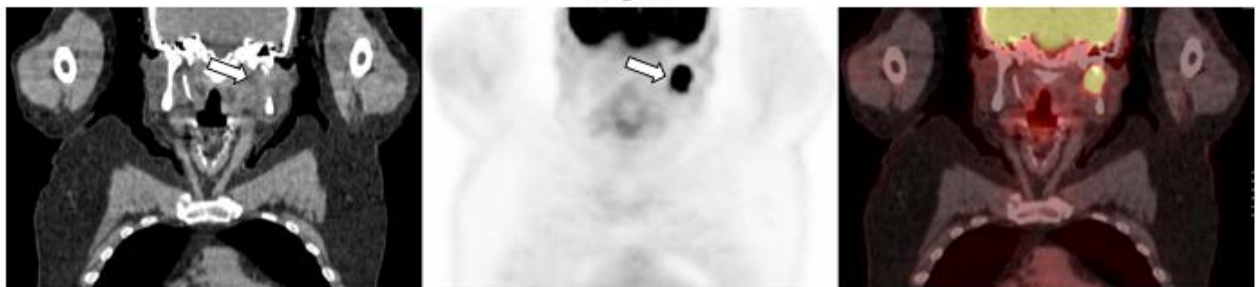


Fig. 2

This 57-year-old man presented with a seven month history of flushing of the face and upper chest, accompanied by chest pain, joint pain, diaphoresis, pruritis, and headache. Urinary 5-HIAA levels were markedly elevated, and an Octreotide scan was ordered to evaluate for a carcinoid tumor. The Octreotide scan and a subsequent chest CT were both negative. A PET-CT was then ordered, which showed a deep left parotid mass with intense tracer uptake (SUV – 19.1) (Figs.1 and 2). The mass was resected and was found to be a pleomorphic adenoma. The patient was symptom free postoperatively.

How did the PET-CT help?

About 80% of parotid tumors are benign, with pleomorphic adenoma (80%) and Warthin's tumor (5-10%) the most common types. Mucoepidermoid carcinoma is most common parotid malignancy (30%). Other parotid malignancies include adenocarcinoma, adenocystic carcinoma, malignant degeneration of pleomorphic adenoma, lymphoma, and metastases. FDG PET is often positive in both benign and malignant tumors, and some benign tumors can have very high SUV's¹⁻³.

- (1) Panminerva Med. 2005; 47(3):187-9.
- (2) Acta Otolaryngol Suppl. 1998; 538:214-20.
- (3) Nucl Med Commun. 2008; 29(4):367-73.