

Incidental detection of a FDG avid skin lesion: Pilar tumor in an oncologic PET/CT study

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Abstract

Fourty nine years old female patient with history of lung operation due to lung cancer attended our department for oncologic FDG PET/CT imaging. FDG PET/CT images revealed incidental detection of a scalp skin lesion with significantly increased FDG uptake. We wanted to present the PET/CT images of this rare tumor especially for this age.

Case

49 years old female patient who underwent FDG PET/CT imaging for restaging for preexisting operated lung cancer and new pleural suspicious plaques in contrast enhanced CT imaging. Significant FDG accumulation was not noticed in the pleural plaques of the patient however in the left frontoparietal region there was a hypermetabolic nodule (14x18 mm in dimension, SUV_{max}=19.33) in the scalp (Figures 1 and 2). Histopathological results revealed trichilemmal cyst (pilar tumor). Pilar tumor is a malign epithelial tumor originating from the hair follicle [1]. This tumor is usually located in the scalp of advanced aged female patients and may present with additional ulceration, infection and sometimes lymph node metastasis [2]. In a previous case report metastases to the lung and intracranial involvement has been reported [3]. There is limited number of case reports with PET/CT findings in the literature [4,5]. This is the case report of a middle aged female patient with incidental detection of high pilar tumor in the scalp. This tumor has high FDG affinity with high SUV levels. Additionally,

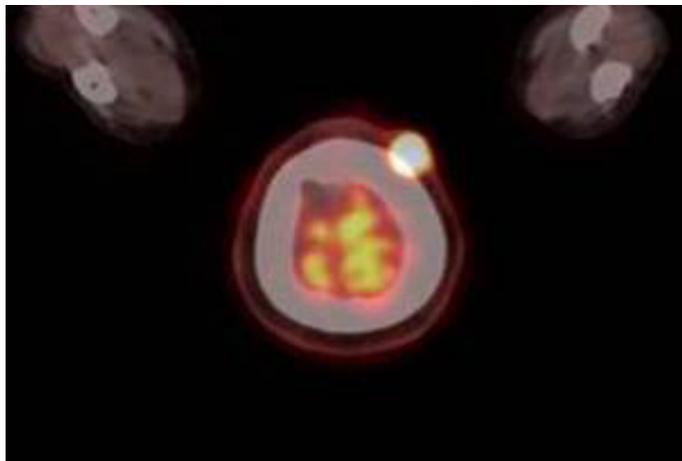


Figure 1. Transaxial fused PET/CT image of the patient including hypermetabolic skin lesion.

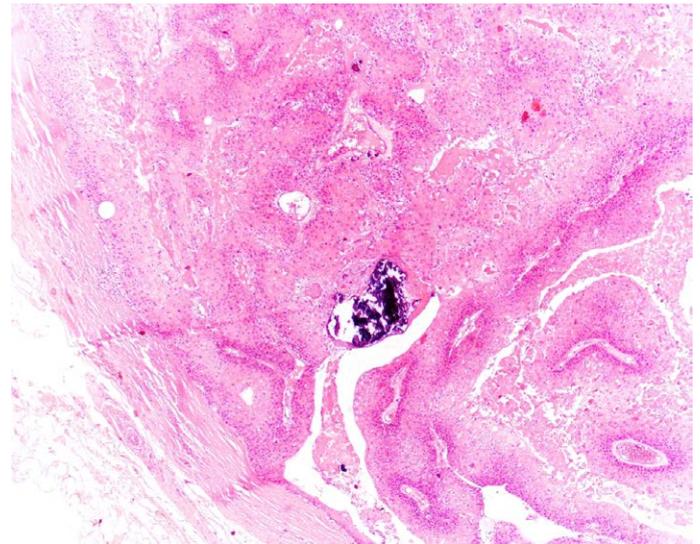


Figure 2. Hemotoksilen & Eosin pathology image: Proliferating trichilemmal cyst (tumor), well demarcated from the surrounding tissue with variably sized lobules of squamous epithelium that is thicker than seen in the pilar cyst. Characteristically, there is eosinophilic amorphous keratin in the centre of the lobules.

PET/CT may be performed to these patients in order to evaluate the lesion or staging.

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