

ROLE OF PET SCAN IN HEAD & NECK CANCER

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The clinical usefulness and role of FDG-PET CT for detection of lymph node involvement and recurrences in patients with head and neck cancer is very well-established. It has been found to be superior to conventional imaging work-ups in the evaluation of patients with head and neck malignancies. FDG PET is also found to be more accurate than CT/MRI imaging in oral cavity cancer¹. However, potential clinical applications include pretreatment staging, treatment monitoring and evaluation of the previously treated patients . The current practice is not in favor of utilizing CT-PET for staging of all newly diagnosed squamous cell carcinomas. However, PET can detect metastatic cervical lymph nodes, which may be clinically occult and may not be detected by CT or MR imaging. It can also detect primary head and neck squamous cell carcinomas greater than 1 cm in size. PET-CT may be performed in squamous cell carcinoma to evaluate for possible occult distant metastases to the lungs or bones . The presence of pulmonary metastases upstages a patient from M0 to M1 and alters the treatment regimen.² Routine imaging work-up for the patient with pulmonary squamous cell carcinoma includes conventional radiography of the chest at most institutions. Chest CT is performed in patients with advanced stage disease. A solitary nodule on CT scan may represent a metastasis or a granuloma. The clinical usefulness and role of FDG-PET CT for detection of lymph node involvement and recurrences in patients with head and neck cancer is very well-established. It has been found to be superior to conventional imaging work-ups in the evaluation of patients with head and neck malignancies. FDG PET is also found to be more accurate than CT/MRI imaging in oral cavity cancer³. However, potential clinical applications include pretreatment staging, treatment monitoring and evaluation of the previously treated patients. The current practice is not in favour of utilizing CT-PET for staging of all newly diagnosed squamous cell carcinomas. However, PET can detect metastatic cervical lymph nodes, which may be clinically occult and may not be detected by CT or MR imaging. It can also detect primary head and neck squamous cell carcinomas greater than 1 cm in size. PET-CT may be performed in squamous cell carcinoma to evaluate for possible occult distant metastases to the lungs or bones⁴. The presence of pulmonary metastases upstages a patient from M0

to M1 and alters the treatment regimen. Routine imaging work-up for the patient with pulmonary squamous cell carcinoma includes conventional radiography of the chest at most institutions.

REFERENCES:

1. Queiroz, Marcelo A., et al. "PET/MRI and PET/CT in follow-up of head and neck cancer patients." *European journal of nuclear medicine and molecular imaging* 41.6 (2014): 1066-1075.
2. Udvaros, I., et al. "[PET scanning in head and neck cancer]." *Magyar onkologia* 45.2 (2000): 169-172.
3. Schoder, Heiko, et al. "Head and Neck Cancer: Clinical Usefulness and Accuracy of PET/CT Image Fusion 1." *Radiology* 231.1 (2004): 65-72.
4. Lindholm, P., et al. "PET scanning of head and neck cancer." *Modern Head and Neck Imaging*. Springer Berlin Heidelberg, 1999. 87-105.

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