Abstract: The aim of this article is to introduce the clinical utility of FDG PET as oncologic imaging. PET (positron emission tomography) is a newly developed imaging tool, and it has increased the accuracy of metabolic mapping of numerous malignancies, with significant impact on the management of cancer patients for initial staging, restaging and therapy monitoring. PET can provide functional information in addition to morphology from conventional imaging modalities. $^{18}$F-labeled 2-fluoro-2-deoxyglucose (FDG) is the most commonly used PET tracer and FDG PET can demonstrate the activity of glucose metabolism throughout the entire body in a single session. We describe the clinical utility of FDG in PET and display images of normal distribution and of patients with head and neck and lung cancer.

Key words: FDG PET, staging, restaging, therapy monitoring, head and neck cancer

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Data analysis

PET scan

Patients preparation

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Clinical utility of FDG PET