

ROLE OF 18F-FDG PET-CT IN EVALUATION OF CA LUNG PATIENTS – MULTICENTER EXPERIENCE IN BANGLADESH.

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Background: Most patients with lung cancer are diagnosed with advanced disease stage, which is clinically aggressive and has high metastatic potential. FDG- PET is widely used in lung cancer staging at diagnosis, response evaluation after systemic treatment, re-staging after neo-adjuvant treatment and surveillance. To determine the diagnostic & prognostic value of 18 F-FDG PET/CT in lungcarcinoma patients. **Methods:** Total 450 pathologically confirmed lung carcinoma patients (aged between 30 and 89 years with mean age of 61 years) without prior surgery and treatment were included, conducted in two centers for 5 years. Semi-quantitative estimation of FDG uptake was performed by calculating SUV max value, corrected for dose administered and body weight. **Results:** This study showed male predominance, 75% patients were male, 25% were female. 58% patients had adenocarcinoma. Smoking was found to be an important contributing factor in male patients. 70% patients had stage III & IV disease. Patients having stage III & IV revealed elevated CEA level than stage I & II. Patients having stage IV disease showed nodal, hepatic, cerebral and skeletal metastases. The SUV max value was higher in patients with squamous cell carcinoma. Treatment plan has changed in 70% of the patients after 18F-FDG whole body PET-CT scan. **Conclusion:** FDG-PET is a useful adjunct in NSCLC TNM staging. The usefulness of FDG-PET mainly lies in nodal staging and distant metastatic survey. The use of PET—CT for preoperative staging of NSCLC reduced both the total number of thoracotomies and the number of futile thoracotomies.

Keywords: 18F-FDG PET-CT ,Ca Lung patients

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