

INDICATION OF F-18 FDG PET/CT IN HEAD AND NECK CANCER, ITS ROLE IN DETECTION OF UNKNOWN PRIMARY TUMOR, RECURRENCE AND DISTANT METASTASIS

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OBJECTIVE

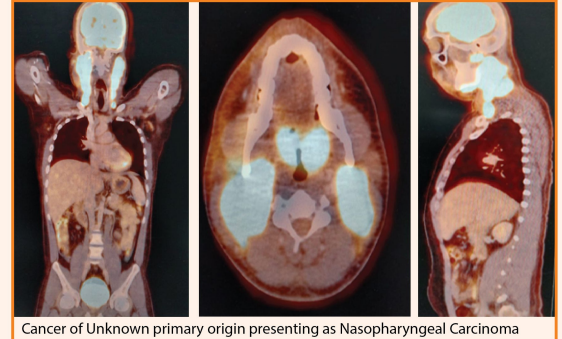
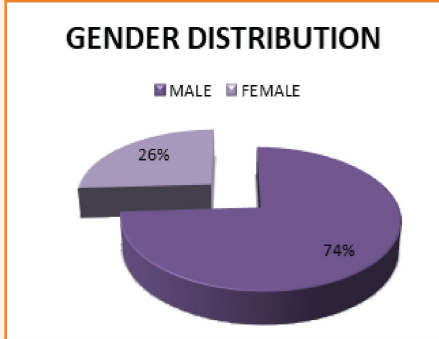
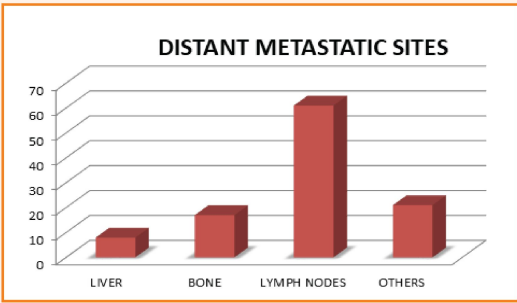
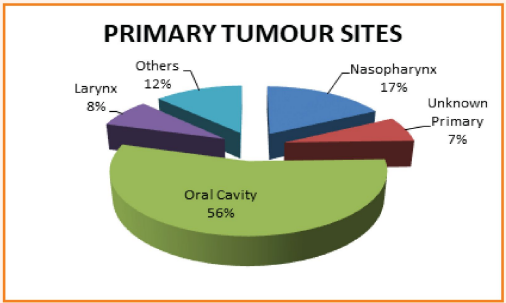
To evaluate the usefulness of positron emission tomography (PET/CT) for the detection of head and neck carcinomas of unknown primary for definitive treatment planning. And its role in patients with Known Primary tumors site for the evaluation of residual tissue or recurrence of primary tumor/distant metastasis.

MATERIAL AND METHODS

143 patients with clinically suspected and/or histologically proven head and neck carcinoma who had undergone 18F-FDG PET-CT during the period of DEC 2016- DEC 2020 were enrolled in the study. The study included 106 males and 37 females with a mean age of 47 years. The data was analyzed by generalized method using statistical computer software.

RESULT

This study showed that 56% patients had oral cavity carcinoma as their primary tumor site, making it as the most prone site of head and neck cancer. The most common indication for referral was tumor restaging (76%) including treatment response evaluation and differentiation between recurrence and



post-treatment changes. In 41% of patients with negative primary tumor site, PET/CT was able to detect evidence of regional metastasis in 9% patients, in 59% patients with recurrent disease of primary tumor site, PET/CT was able to detect evidence of lymph nodes involvement (56%) and distant metastasis (34%). PET/CT was able to localize the primary tumor site in 50% of patients with unknown primary tumor site. We also had 34 patients with primary head and neck cancer referred for initial staging pre-treatment work-up. 18F FDG PET/CT demonstrated evidence of metastasis in 79% of all cases. Out of 34 patients, 27 (79%) had lymph nodes metastasis.

CONCLUSION

18F-FDG PET/CT is a reliable tool for the management of patients having known and Unknown primary tumor site. It plays an important role in pre and post treatment management of head and neck cancers for detection of residual or recurrent disease presenting with lymph nodes involvement and distant metastasis. 18F-FDG PET/CT is also required to reveal unknown primary tumor so that the site with intense uptake can suggest for biopsy. It is expected that with the advent of 18F-FDG PET/CT scan Head and Neck tumor management become more effective with better outcome.