



INDICATIONS FOR THE USE OF ¹⁸F-FDG PET CT IMAGING IN THE MANAGEMENT OF HEAD AND NECK CANCER

Background

¹⁸F-FDG PET CT has been shown to be useful in the management of this numerical small but often complex group of patients. Original guidance was produced in 2008 with further update in 2016 in light of new evidence and expert consensus. This current iteration builds on these previous documents takes into account current clinical evidence, clinical management guidelines, expert opinion and also to reflect current clinical practice. In particular consideration was given to the updated NICE guideline [NG36] (updated 2018), Head and Neck Cancer: United Kingdom National Multidisciplinary Guidelines (2016) and the recent consensus guidelines from the Scottish National Thyroid Cancer Project (2020).

PET CT remains a relatively limited resource and should primarily be used where the result of the scan would/could directly influence individual patient management and treatment.

Routine Indications

- Patients with biopsy proven metastatic cervical lymphadenopathy with no primary found on clinical examination and where CT/MRI are negative/equivocal. It is desirable to perform PET prior to biopsy of suspected but unproven primary sites. To expedite this process, if conventional imaging fails to identify a primary site, direct referral from the reporting specialist head and neck radiologist can be considered.
- To assess disease response, in conjunction with locally agreed policy, 3-6 months post (chemo)radiotherapy in patients with locally advanced, node positive, head and neck cancer
- In patients with clinically suspected disease recurrence post treatment in whom CT/MRI results are negative/equivocal.
- Staging of N3 upper aerodigestive tract cancer
- Staging of T4 cancer of hypopharynx or nasopharynx
- In selected cases of advanced disease where complex management decisions need to be made. Such patients must be referred through a multidisciplinary team process.
- Treated differentiated thyroid cancer patients with rising thyroglobulin and negative or equivocal conventional imaging, including ¹³¹I/¹²³I, US and CT.
- In patients with iodine refractory differentiated thyroid cancer prior to starting Tyrosine Kinase Inhibitor (TKI) therapy
- In selected patients with differentiated thyroid cancer prior to radical treatment for recurrent locoregional disease or oligometastatic disease.

Non routine

- Patients with treated medullary carcinoma of thyroid with a raised calcitonin level and negative or equivocal conventional imaging (including ⁶⁸Ga DOTA PET CT).

Future Considerations

These guidelines will be reviewed on an ongoing basis in order to incorporate any significant changes to the existing evidence base.

References

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NOTE

This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.