Scottish Clinical Imaging network

NHS National Services Scotland

INDICATIONS FOR THE USE OF ^{18}F-FDG PET IMAGING IN THE MANAGEMENT OF SARCOMA PATIENTS AND GASTROINTESTINAL STROMAL TUMOURS (GIST)

Background

This guideline brings together the agreed indications for PET-CT scanning of sarcoma patients in Scotland. This was originally developed following the 2016 update of the PET-CT indications by the Royal College of Radiologists and was developed by the Scottish Sarcoma Network (SSN) in partnership with the Scottish Clinical Imaging Network (SCIN). This update is part or a routine review of PET CT indications. There has been no change to previously agreed indications as a result of this review.

Despite guidance from The Royal College of Physicians and the Royal College of Radiologist and other organisations, the evidence base for PET-CT in the management of sarcoma is not very strong. As such PET CT imaging in this tumour group continues to be considered as "non-routine" with the expectation that requests will only be submitted following discussion at the Scottish Sarcoma or Aberdeen/Dundee/Edinburgh/Inverness centre upper gastrointestinal cancer multi-disciplinary team (MDT) meeting.

As with all cases, PET referrals should only be considered where the outcome of the investigation will directly influence individual patient management and treatment. Referrals not covered by this guidance can be considered in discussion with the local PET CT lead clinician or ARSAC holder.

Non routine Indications

- Assessment of disease response in patients with GIST receiving systemic therapy.
- Staging of high-grade sarcomas with a high tendency to have early metastatic disease. This includes Ewing's sarcoma, rhabdomyosarcoma (including alveolar), osteosarcoma, synovial sarcoma and myxoid liposarcoma. These specific sub-types represent less than 15% of all soft tissue sarcomas. There is no clear role for PET CT in the staging of other types of high-grade sarcoma
- Pre-amputation of high-grade sarcomas to assess for distant disease that would alter surgical management, for example if amputation is considered as the definitive treatment of a limb primary sarcoma.
- In patients with metastatic high-grade sarcomas being considered for liver or lung metastectomy.
- For the staging, response to therapy and restaging/detection of relapse of paediatric patients with osteosarcoma, Ewing's sarcoma and rhabdomyosarcoma.

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Future Considerations

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

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