

Follicular Lymphoma

Initial Staging

Diagnostic quality CT with contrast or PET/CT may be used for initial staging. Clinical stage is modified in only 15-20% of patients with use of PET/CT and results in a change in treatment in only 8% of patients (Zelenetz 2024). A baseline PET/CT is useful for comparison for treatment response and to determine if further treatment intensification is necessary, and is recommended if systemic therapy is planned. PET/CT is particularly important in the setting of localized disease with a plan for RT only, to rule out any other systemic disease and to serve as a baseline for treatment response (Zelenetz 2024, Barrington 2016, Barrington 2016 PMID: 27095319, Cheson 2014).

Restaging

PET/CT is of unclear utility for interim restaging, as interim PET/CT response shows no association with overall survival, thus conventional CT is supported (Dupuis 2012). PET/CT does identify patients at risk of progression at end of induction therapy, where initial studies showed that 69 % of patients who were classified as not having complete remission on CT were re-classified as complete metabolic remission when staged with PET/CT at end of induction (Barrington 2016 PMID 27095319). This increased sensitivity and specificity more accurately identifies patients at risk of poor progression free survival who may be candidates for consolidative therapy, and prevents over and under-treatment. These results only apply to end of induction PET/CT (Barrington 2016 PMID 27095319, Zelenetz 2024, Barrington 2016).

While PET/CT alone is not sufficient to diagnose transformation of follicular lymphoma to diffuse large B cell lymphoma, when clinical signs and symptoms and lab values suggest transformation, PET/CT can be useful to detect transformation. SUV >10 predicts aggressive lymphoma with 80% certainty and PPV increases at higher SUVs (Noy 2009, Zelenetz 2024). FDG avidity is also standard of care to select biopsy site in suspected transformation (Noy 2009, Zelenetz 2024)

Surveillance

There is little data on the role of surveillance imaging in indolent lymphomas including follicular lymphoma. The majority of relapses occur within the first 2 years post completion of therapy, and our guidelines align with the NCCN support of CT no more than every 6 months in the first

two years and no more than annually following. Given that indolent lymphoma is considered a chronic condition, there is no endpoint for this imaging if requested (Zelenetz 2024). The exception is pediatric –type follicular lymphoma, for which there is no survival benefit with detection of recurrence via surveillance imaging vs clinical detection; surveillance imaging is not supported in this population (Lynch 2014, Zelenetz 2024). PET/CT surveillance is generally not supported, due to a false positive rate as high as 20%, with no documented survival benefit, and increased radiation, invasive procedures, anxiety and cost (Zelenetz 2024, ASCO 2024, Lynch 2014).

References

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