

## عنوان مقاله:

Metabolic tumor parameters complement clinicopathological factors in prognosticating advanced stage Hodgkin Lymphoma

## محل انتشار:

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## خلاصه مقاله:

**Objective(s):** Advanced Hodgkin Lymphoma has a higher probability of relapse and recurrence. Classical clinicopathological parameters including the International Prognostic Score (IPS) have not been reliable in predicting prognosis or tailoring treatment. Since FDG PET/CT is the standard of care in staging Hodgkin Lymphoma, this study attempted to evaluate the clinical utility of baseline metabolic tumor parameters in a cohort of advanced Hodgkin lymphoma (stage III and IV). **Methods:** Histology-proven advanced Hodgkin Patients presenting to our institute between ۲۰۱۲-۲۰۱۶ and treated with chemo-radiotherapy (ABVD / AEVD) were followed up till ۲۰۱۹. Quantitative PET/CT and clinicopathological parameters were used to estimate the Event Free Survival (EFS) in ۱۰۰ patients. Kaplan-Meier method with log-rank test was used to compare the survival times of prognostic factors. **Results:** At a median follow-up of ۴۸.۸۳ months (IQR:۳۳.۳۱-۶۳.۰۵ months), the five-year-EFS was ۸۱%. Of the ۱۰۰ patients, ۱۶ had relapsed (۱۶%) and none died at the last follow-up. On Univariate analysis, among non-PET parameters bulky disease ( $P=۰.۰۳$ ) and B-symptoms ( $P=۰.۰۴$ ) were significant while among PET/CT parameters SUVmax ( $p=۰.۰۰۱$ ), SUVmean ( $P=۰.۰۰۲$ ), WBMTV۲.۵ ( $P<۰.۰۰۱$ ), WBMTV۴۱% ( $P<۰.۰۰۱$ ), WBTLG۲.۵ ( $P<۰.۰۰۱$ ) and WBTLG۴۱% ( $P<۰.۰۰۱$ ) predicted poorer EFS. ۵-year EFS for patients with low WBMTV۲.۵ [ $<10.38.3 \text{ cm}^3$ ] was ۸۹% and ۳۵% for patients with high WBMTV۲.۵ [ $\geq 10.38.3 \text{ cm}^3$ ] ( $p<۰.۰۰۱$ ). In a multivariate model, only WBMTV۲.۵ ( $P=۰.۰۳$ ) independently predicted poorer EFS. **Conclusion:** PET-based metabolic parameter (WBMTV۲.۵) was able to prognosticate and complement the classical clinical prognostic factors in advanced Hodgkin Lymphoma. This parameter could have a surrogate value for prognosticating advanced Hodgkin lymphoma. Better prognostication at baseline translates to tailored or risk-modified treatment and hence higher survival.

