Advances in the Diagnosis and Treatment of NK/T-Cell Lymphoma: Perspectives and Team Experience

Huangming Hong
Sichuan Cancer Hospital, China

NK/T-cell lymphoma, particularly extranodal NK/T-cell lymphoma (ENKTL), is an aggressive malignancy prevalent in Asian populations, with limited standardized therapeutic guidelines. This presentation outlines key advancements and clinical experiences from a leading Chinese oncology center. A significant contribution is the establishment of a novel clinical staging system (CA staging), developed through multicenter studies in Asia, which provides more accurate risk stratification and guides individualized treatment strategies compared to the traditional Ann Arbor staging.
The role of EBV-DNA dynamic monitoring is emphasized as a critical prognostic tool, with clearance rates correlating with treatment response and survival outcomes. Therapeutic advances include optimized radiotherapy approaches for early-stage disease, where consolidation radiotherapy remains essential even after complete remission with induction chemotherapy, though optimal dosing requires further refinement.
For advanced ENKTL, the DDGP regimen (cisplatin, dexamethasone, gemcitabine, and pegaspargase) demonstrates superior progression-free survival (PFS) and overall survival (OS) compared to the SMILE regimen. Immunotherapy combinations, such as PD-1 inhibitors with anti-angiogenic agents and asparaginase, show promising efficacy in relapsed/refractory settings. Emerging strategies to overcome PD-1 resistance, including XPO1 inhibitors combined with PD-1 blockade, are under investigation.
The role of hematopoietic stem cell transplantation (HSCT) is also reviewed, with evidence supporting autologous HSCT for consolidation in responding advanced patients and allogeneic HSCT as a viable option for eligible relapsed/refractory cases.
In conclusion, integrated approaches incorporating risk-adapted staging, EBV monitoring, multimodal therapy, and novel immunotherapeutic agents are improving outcomes for ENKTL patients. Ongoing studies continue to refine treatment paradigms and address unmet needs in this challenging lymphoma subtype.

Keywords: NK/T-cell lymphoma, ENKTL, CA staging, EBV-DNA, radiotherapy, DDGP, PD-1 inhibitor, hematopoietic stem cell transplantation.