

The Clinical and Survival Differences between Primary B-Cell and T/NK-Cell Non-Hodgkin Lymphomas in the Nasopharynx, Nasal Cavity, and Nasal Sinus: A Population-Based Study of 3839 Cases in the Seer Database

Authors : Jiajia Peng, Danni Cheng, Jianqing Qiu, Yufang Rao, Minzi Mao, Ke Qiu, Junhong Li, Fei Chen, Feng Liu, Jun Liu, Xiaosong Mu, Wenxin Yu, Wei Zhang, Wei Xu, Yu Zhao, Jianjun Ren

Abstract : Background: Currently, primary B-cell non-Hodgkin lymphoma (B-NHL) and T/NK-cell non-Hodgkin lymphoma (NKT-NHL) originated from the nasal cavity (NC), nasopharynx (NP) and nasal sinus (NS) distinguished unclearly in the clinic. Objective: We sought to compare the clinical and survival differences of B-NHL and NKT-NHL that occurred in NC, NP, and NS, respectively. Methods: Retrospective data of patients diagnosed with nasal cavity lymphoma (NCL), nasopharyngeal lymphoma (NPL), and nasal sinus lymphoma (NSL) between 1975 and 2017 from the Surveillance, Epidemiology, and End Results (SEER) database were collected. We identified the B/NKT-NHL patients based on the histological type and performed univariate, multivariate, and Kaplan-Meier analyses to investigate the survival rates. Results: Of the identified 3,101 B-NHL and 738 NKT-NHL patients, those with B-NHL in NP were the majority (43%) and had better cancer-specific survival than those in NC and NS from 2010 to 2017 (5-year-CSS, NC vs. NP vs. NS: 81% vs. 83% vs. 82%). In contrast, most of the NKT-NHL originated from NC (68%) and had the highest CSS rate in the recent seven years (2010-2017, 5-year-CSS: 63%). Additionally, the survival outcomes of patients with NKT-NHL-NP (HR: 1.34, 95% CI: 0.62-2.89, P=0.460) who had received surgery were much worse than those of patients with NKT-NHL-NC (HR: 1.07, 95% CI: 0.75-1.52, P=0.710) and NKT-NHL-NS (HR: 1.11, 95% CI: 0.59-2.07, P=0.740). NKT-NHL-NS patients who had radiation performed (HR: 0.38, 95% CI: 0.19-0.73, P=0.004) showed the highest survival rates, while chemotherapy performed (HR: 1.01, 95% CI: 0.43-2.37, P=0.980) presented opposite results. Conclusions: Although B-NHL and NKT-NHL originating from NC, NP and NS had similar anatomical locations, their clinical characteristics, treatment therapies, and prognoses were different in this study. Our findings may suggest that B-NHL and NKT-NHL in NC, NP, and NS should be treated as different diseases in the clinic.

Keywords : nasopharyngeal lymphoma, nasal cavity lymphoma, nasal sinus lymphoma, B-cell non-Hodgkin lymphoma, T/NK-cell non-Hodgkin lymphoma

Conference Title : ICHPCTI 2022 : International Conference on Health Psychology, Chronic and Terminal Illness

Conference Location : London, United Kingdom

Conference Dates : February 15-16, 2022