The Insights of Head and Neck Non-Hodgkin Lymphoma

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We read with great interest the case reports entitled “Mantle Cell Lymphoma: A Rare Vallecular Tumour” and “Nasal Plasmablastic Lymphoma in an HIV-Negative Immunocompetent Patient” published in the recent Medeniyet Medical Journal. It is indeed a rare case even in the setting of otolaryngology (ORL) service. Among ORL manifestations of non-Hodgkin lymphoma (NHL), the vast majority are related to diffuse large B-cell lymphoma, followed by follicular lymphoma. Therefore, it would provide another insight into B-cell NHL in the head and neck regions.

Lymphoma of head and neck is not uncommon. It is the second most common primary malignancy occurring within that region because of the cells in head and neck predominantly consist of lymphoid tissue and glands. However, in agreement with many reported series of head and neck lymphoma, it often imposes a diagnostic challenge regarding its clinical, and histopathological features. Their various histologic subtyping is the main challenging issue for all pathologist. The B-cell lymphoma accounts about 90% of cases while the rest are T-cell and NK-cell type. Based on the latest WHO classification, the mature B-cell NHL consists of 50 subtypes including its variants. Another crucial decision is to classify them as indolent or aggressive subtypes based on morphology and immunophenotyping because some subtypes cannot easily be classified into these categories. The clinical presentation the extranodal type is challenging especially in the absence of any lymph node involvement based on clinical examination or radiological findings.

Mantle cell lymphoma (MCL) is typically considered as an aggressive and rare form of B-cell NHL, which commonly involves the gastrointestinal tract. MCL is differentiated from another type of lymphoma with overexpression of cyclin D1 protein which is found in more than 90% of patients. The cells morphology described in this case as monotonous with medium cell size, composed of centrocytes displaying cleaved nuclei, inconspicuous nucleoli and scanty cytoplasm. Some mitotic figures are present, and the tumour cells exhibit the Ki-67 proliferative index of 40-50%. However, it would be valuable if the authors could classify
this histologic variant of MCL as classical, blastoid or pleomorphic subtype because each subtype has different prognostic outcomes. The former is an intermediate grade (less aggressive), but the latter two are considered aggressive. Other than that, providing the flow cytometric and cytogenetic data would be very helpful in this case. Nevertheless, reporting a case of MCL involving vallecula is excellent as it can give a new insight into the vallecular tumour, which predominantly occupied by a benign cyst⁴.

Pertaining to the case of nasal plasmablastic lymphoma (PBL), it is a rare and highly aggressive subtype of diffuse large B-cell lymphoma (DLBCL) that commonly involves the oral mucosa, head and neck region. It is characterized by diffuse proliferation of large neoplastic cells displaying the morphology of immunoblasts but with the immunophenotype of CD138-positive, CD20 B-cell negative plasma cells. Therefore, obtaining a definite diagnosis is critical as we need to make a decision in consideration of the balance between the absence of classic B-cell markers and the presence of plasma cell markers, and must exclude the other end of the spectrum which is plasmablastic myeloma or multiple myeloma. In view of Ki-67 70% positivity, which is not very high for PBL (usually >90%), other markers should be studied like kappa lambda, CD56, CD38, PAX5, and also c-MYC. All these markers will be very useful to support the diagnosis of PBL. However, reporting a case of PBL in an immunocompetent woman with epistaxis is brilliant, especially for an HIV-negative patient because it predominantly occurs in immunosuppressive hosts.

In conclusion, NHL represents a heterogeneous group of malignancies with various subtypes each having distinct morphologic and clinical features, immunophenotypic and genetic responses to therapy, and prognosis. Interdisciplinary involvement is warranted in managing such cases. Indeed sharing these two interesting cases with readers is really in line with scientific goals of the Journal.

REFERENCES