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IMAGES

Mummified cells in nodular lymphocyte predominant Hodgkin lymphoma

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A 12-year-old child presented with a parotid mass. Superficial parotidectomy showed a completely resected lymph node with diffuse architectural effacement by large nodules of small lymphocytes admixed with large, atypical cells (panel A; hematoxylin and eosin stain, original magnification × 400, inset × 1000). The majority of the neoplastic cells were characterized by large, pyknotic nuclei ("mummified cells"), a finding typically associated with classic Hodgkin lymphoma (CHL). However, immunohistochemical stains showed that the large cells were strongly positive for CD20 (panel B; original magnification × 400, inset × 1000) and CD45 (panel C; original magnification × 400, inset × 800) while negative for CD30 (panel D; CD30 highlights reactive immunoblasts, original magnification × 400) and CD15 (panel E; original magnification × 400). EBER-ISH was negative. The nodules were populated primarily by small B cells (panel B) and contained expanded follicular dendritic cell meshworks (panel F; CD21 immunostain, original magnification × 40). Taken together, these findings were diagnostic of nodular lymphocyte predominant Hodgkin lymphoma (NLPHL). Following resection, the patient was managed with close observation alone and had no evidence of disease recurrence at 12-month follow-up.

There is a mounting body of evidence demonstrating that select pediatric NLPHL patients with stage I disease can be cured with complete surgical resection alone without the need for chemotherapy or radiation [1], emphasizing the importance of accurate pathologic classification and distinction of this entity from CHL. While mummified cells are traditionally considered a distinctive morphologic feature of CHL [2], this case demonstrates that they can also be seen in NLPHL. As the neoplastic cells of CHL and NLPHL can occasionally exhibit considerable morphologic overlap, careful evaluation of immunophenotype, background cellularity, and tumor architecture is essential for an accurate diagnosis and optimal patient care.

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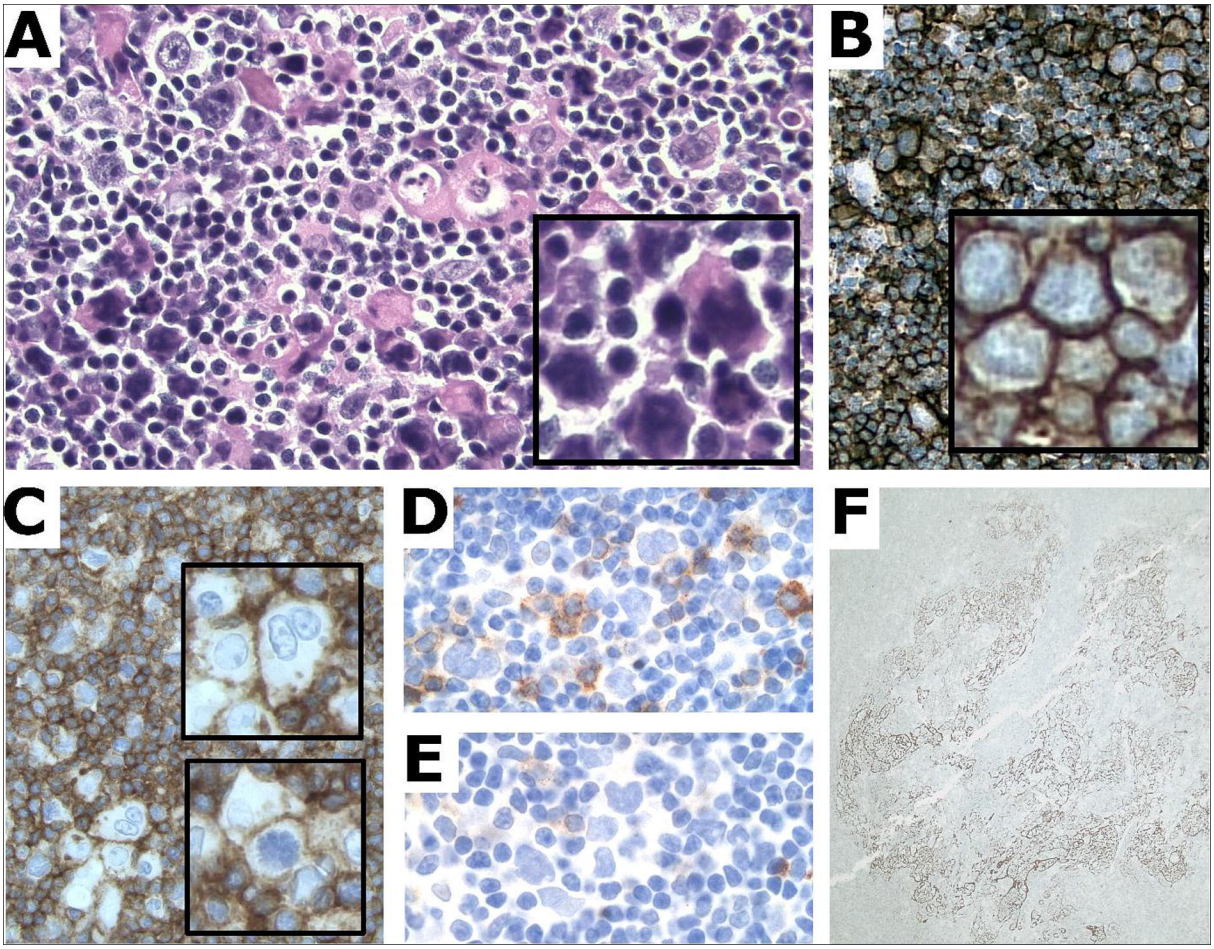

Compliance with ethical standards

Conflict of interest The authors declare they have no conflict of interest.

References

1. Appel BE, Chen L, Buxton AB, Hutchison RE, Hodgson DC, Ehrlich PF, Constine LS, Schwartz CL (2016) Minimal treatment of low-risk, pediatric lymphocyte-predominant Hodgkin lymphoma: a report from the Children's Oncology Group. J Clin Oncol 34(20): 2372–2379
2. Lorenzen J, Thiele J, Fischer R (1997) The mummified Hodgkin cell: cell death in Hodgkin's disease. J Pathol 182(3):288–298

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