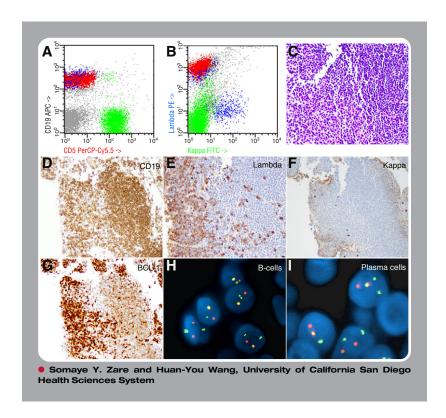


## CD5<sup>-</sup>/SOX-11<sup>-</sup> mantle cell lymphoma with concomitant monotypic plasmacytic differentiation



91-year-old woman was found to have bilateral cervical and right supraclavicular lymphadenopathy by computed tomography scan following an accident. There was no M-paraprotein in serum and there were no lytic bone lesions. Fine needle aspiration of the right cervical lymph node revealed admixture of small mature lymphoid cells and plasma cells (PCs) (not shown). Flow cytometry of fine needle aspiration showed CD5 $^-/\lambda$ -restricted monotypic B cells (red, panels A-B) in the background of polytypic B cells (blue, panels A-B). Hematoxylin and eosin stain of the core biopsy (panel C) showed small lymphoid cells (panel C, right) and a sheet of PCs (panel C, left). The small lymphoid cells and PCs showed the following overlapping immunohistochemical profiles: CD19 $^+/\lambda^-/\kappa^-/BCL-1^+$  and CD19 $^+/\lambda^+/\kappa^-/BCL-1^+$ , respectively (panels D, E, F, and G, respectively). Fluorescence in situ hybridization analysis using Vysis IGH/CCND1 XT dual-color dual-fusion probe showed rearrangement of BCL-1 (yellow) in both B cells (panel H) and PCs (panel I). Both monotypic lymphoid cells and PCs were negative for SOX-11 (not shown).

This is a unique case of CD5<sup>-</sup>/SOX-11<sup>-</sup>  $\lambda$ -restricted mantle cell lymphoma (MCL) with concomitant  $\lambda$ -restricted monotypic PCs. Only 3% to 4% of MCLs are negative for CD5, and monotypic plasmacytic differentiation in MCL is extremely rare. Absence of SOX-11 is consistent with the reported findings that knockdown of SOX-11 in MCL cells increased expression of plasma cell antigens.



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