Analysis of the adult thymus in reconstitution of T lymphocytes in HIV-1 infection


A production error resulted in the incorrect printing of Figure 1; the correct display appears below. We regret the error and have provided corrected reprints to the corresponding author: Barton F. Haynes, Box 3703, Duke Hospital, Durham, North Carolina 27710, USA. Phone: (919) 684-5384; Fax: (919) 681-8992; E-mail: Hayne002@mc.duke.edu

Figure 1
Immunohistological analysis of the thymus in HIV infection. (a–d) Thymus from HIV-1+ patient no. 1 with no thymopoiesis. (e–h) Thymus from HIV-1+ patient no. 2 with areas of active thymopoiesis. (a) Hematoxylin and eosin stain of patient no. 1’s lymphoid thymus. ×13. (b) A similar area as in a, with thymic epithelium in immunohistological analysis reactive with antikeratin antibody (brown central areas). All keratin+ thymic epithelium (e) in the true thymus is collapsed (dark brown areas) and devoid of lymphocytes, with a surrounding infiltrate of blue mononuclear cells present in the thymic perivascular space (P). ×13. (c) Immunohistological stain of CD8+ T cells (brown cells; see arrows for examples) in the perivascular space (P) around a central empty thymic epithelial island (e). The dotted line surrounds thymic true epithelial thymus areas (e), and the short arrow points out a rare CD8+ T cell within the true epithelial thymus (e). ×66. (d) Many of the perivascular space (P) CD8+ cells are reactive with MAB TIA-1 (arrows) and therefore are mature effector cytotoxic T cells. ×66. e–h are from patient no. 2’s thymus. ×33. (e) Light microscopic view of patient no. 2’s thymus (hematoxylin and eosin stain with a Hassall’s body [h] in the thymus medulla). (f) Immunohistological analysis with antikeratin antibody, with areas of normal-appearing keratin+ thymic epithelium (brown areas) filled with lymphocytes (blue areas) intermingled with thymic epithelium (arrows). Most developing thymocytes are CD3+ T cells (arrows in g), many of which are normal CD1a+ cortical thymocytes (brown cells, arrows in h). A subset of these CD1a+, CD3+ immature thymocytes were actively dividing as determined by nuclear reactivity with MAB mib-1 (not shown). MAB, monoclonal antibody.