We performed some preliminary experiments to show that urease at room temperature and the concentration used would not be capable of degrading the urea in a sample containing 15–50 mmol (90–360 mg/100 ml) urea. We were also able to show that urease can function in the presence of 3-6 g/l formaldehyde at 56°C, these being the conditions in the peroxidase fixation bath.

Working alkaline peroxidase diluent containing urease has been used in this laboratory for the past six months without any apparent adverse effects on the Technicon H6010C. Addition of the urease has doubled the cost of alkaline peroxidase diluent and added an additional 0.005 Australian dollars (0.5 cents) to the cost of processing each sample when the semi-stat option is used.

It should be noted that although erroneous results obtained for grossly uraemic samples using the standard reagent system are easily recognised, invalid results for mildly uraemic samples (with only a slight spurious increase in leucocyte and lymphocyte counts) could easily be overlooked. Use of urease overcomes this problem and is recommended for use in the H6010C when its throughput includes blood samples for uraemic patients.

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Letters to the Editor

Centrorrhexis: a “new” reaction pattern of lymph nodes

Disruption and reorganisation of the network constituted by the follicular dendritic cells or dendritic reticulum cells (DRC) have been shown to be common and characteristic features of AIDS (acquired immune deficiency syndrome, and related persistent generalised lymphadenopathy.1–6 although not specific.4 We immunostained lymph node tissues from 12 cases of persistent generalised lymphadenopathy (all came from the metropolitan area of Los Angeles and fulfilled the criteria for persistent generalised lymphadenopathy given by the Centers for Disease Control)7 by using antiserum raised against acid cysteine proteinase inhibitor (ACPI, isolated and purified from human squamous epithelia).4 The method is unique in that it marks DRC in routinely fixed and paraffin embedded tissues, and yields specimens with cellular detail in a good state of preservation.8

As regards the behaviour of DRC, in most cases of persistent generalised lymphadenopathy some or many germinal centres exhibit profound changes that can be summarised as follows: disruption and fragmentation of the normal follicular DRC pattern; haphazardly organised DRC, which tightly embrace groups of follicular centre cells; hypertrophy and intense ACPI immunoreactivity of occasional DRC; and infiltration between the groups of well organised DRC by a mixture of lymphoid cells consisting of both follicular centre cells and non-follicular centre cells types (figs 1 and 2).

We suggest centrorrhexis as a term...
describing the above events as it covers the essential features of this peculiar phenomenon.

Centrorrhesis is important as: DRC may represent a reservoir of HTLV-III (HIV)*; the extent of it may be of prognostic importance in patients infected with (HIV); and it is found in some other disorders, including Toxoplasma gondii infection, the acute phase of which shares with persistent generalised lymphadenopathy, AIDS-related complex, and AIDS, the phenomenon of a reversed helper:suppressor cell ratio for peripheral blood lymphocytes. Appreciation of centrorrhesis may shed new light on the interplay between events taking place in organised lymphoid tissue and subsets of circulating lymphocytes.

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References


Immunoreactivity of Reed Sternberg cells in paraffin and frozen sections

Recently much attention has been focused on the reactivity of the Reed Sternberg cell and its morphological variants with the monoclonal antibody Leu M1. This can be detected both in paraffin and frozen sections using standard immunohistochemical techniques. In the series reported1–5 Reed Sternberg cells reacted with Leu M1 in most cases of Hodgkin’s disease in all histological subgroups with the exception of the nodular variant of lymphocyte predominant Hodgkin’s disease. This was taken to support the