planta rejection. The absence of staining for leucocyte markers and the characteristic electron microscopic findings show that the light microscopic appearances do not merely represent inflammatory cell fragmentation.

The pathogenesis of this finding is uncertain. Mild ischaemia and cytotoxic T lymphocyte mediated killing can both cause apoptosis. Clinically important ischaemia must have occurred in this case because of the severity of vascular damage. Lymphocytic infiltration was seen in tubules but was absent in glomeruli. In rats perfusion of kidneys with Lyl antibody, which binds to mesangium, induces “mesangiolysis”, changes morphologically similar to apoptosis. Antibody dependent mechanisms are thought to be important in vascular rejection with endothelial cells the principal target. Interestingly, apoptosis was most prominent in glomerular endothelial cells.

The importance of apoptosis in transplant rejection is unclear. It may represent a specific form of cell killing or be a reflection of ischaemia. Further studies are underway to assess its clinical importance in various patterns of rejection and its prognostic value, if any.

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**Value of throat swabs from index cases of meningococcal meningitis**

We believe that Jewes, Norman, and McKendrick may have misinterpreted our comments in the British Medical Journal in 1986. We agree with their contentions; large numbers of contact isolates received at the reference laboratory show just how diverse these can be.

In the Broadsheet, however, we discussed the value of a throat swab obtained from the index case as an aid to diagnosis. Meningococci can be isolated from throat swabs in about half the cases of invasive meningococcal disease, and the isolation rate seems to be unaffected by parenteral antibiotic treatment administered within three or four hours of the collection of the throat swab (Cartwright KAV, unpublished observations). While in theory it may be possible for a case to yield different strains from cerebrospinal fluid, blood, and throat cultures, in practice this situation has never been encountered among the many “sets” of such strains received at the reference laboratory each year. If a meningococcus is isolated from a throat swab in addition to a deep site (blood or cerebrospinal fluid) the strains are always of the same group and type (though strains from the throat are often less well endowed with capsular polysaccharide and are therefore occasionally non-groupable).

We therefore reiterate our belief in the value, both clinical and epidemiological, of throat swabs collected from the index case, especially when the patient has been given parenteral penicillin by the general practitioner or when a lumbar puncture has not been performed.

We are currently preparing data for publication on the pattern of meningococcal carriage in contacts of cases of meningococcal disease.

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**Leukaemic phase of mantle zone lymphoma**

The article, “Leukaemic phase of mantle zone (intermediate) lymphoma: its characterisation in 11 cases,” was very informative. Intermediate lymphocytic lymphoma (ILL) can pose problems with regard to correct diagnosis and classification in the patient. In their introduction the authors mention that in the Working Formulation most cases would be assigned to the category of small cleaved cell type with intermediate prognostic grade. In their discussion, however, they state that it is of a low grade lymphoma. It is therefore not clear from this paper or from the literature as to the proper grading of this type of lymphoma in the Working Formulation. Weisenburger et al., on the basis of immunophenotyping and cytogenetic studies, suggest that there is a close linealage between ILL and small lymphocytic lymphoma/chronic lymphocytic leukaemia. They feel that on the basis of their differing clinical, cytological, and architectural features, cases of ILL should be considered a separate category of lymphocytic lymphoma of the Working Formulation. On the other hand, the median survival of less than 24 months in the series reported by Pombo de Oliveira, Jaffe, and Cattovsky, and 22 months in leukemia patients in the series reported by Weisenburger et al., would tend to suggest that it may be more appropriately classified into the intermediate prognostic grade. In the latter series, even in cases without leukaemic phase, the median survival was only 35 months.

Perhaps a multi-institutional study comprising a large number of cases, which also incorporates immunological and cytogenetic data, would result in a better understanding and therefore a more appropriate categorisation of this non-Hodgkin’s lymphoma.

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**HPV or human parvovirus?**

A short while ago a letter in this Journal commented on the inappropriateness of the designation “HPV” for human parvovirus, stating that HPV had been the denominator for human papillomaviruses for many years. At the risk of the subject becoming tedious, I would like to expand on this issue. Earlier this year I expressed concern regarding the use of the abbreviation “HCV” for a newly identified non-A, non-B hepatitis virus designated C. As far back as 1975 a report by the Study Group on Coronavirus, Vertebrate Virus Subcommittee, International Committee on the Taxonomy of Viruses (ICTV) proposed a list of abbreviations for the species of coronavirus, including HCV for human coronavirus. This and abbreviations for other coronaviruses were again stated in the second report of the ICTV Coronavirus Study Group 1978.

The use of the abbreviation HCV for a hepatitis C virus in man could cause considerable confusion, and matters could get worse should another candidate non-A, non-B hepatitis virus be designated hepatitis E virus (HEV). This abbreviation already exists for the HEV in the official nomenclature. It would be desirable to change the designation of human papillomavirus from “HPV” to “HVP” or “HVP” to avoid confusion. Certainly from a taxonomic viewpoint it would be preferable to use “HVP” for human parvovirus.