Letters to the Editor

Oral anticoagulation and antithrombin III

We were interested to read the paper by Bull et al., attributing the increase in antithrombin III seen in patients on oral anticoagulant therapy to age and underlying disease rather than anticoagulant treatment itself. We have also measured antithrombin III in patients on oral anticoagulant therapy (nicoumalone) but compared results before and after stopping treatment. Two separate series of patients were studied. In both series antithrombin III was measured before stopping and eight days after complete discontinuation, in the first series of seven patients using the method of immunodiffusion with Behringwerke antibody and in the second series of 13 patients using chromogenic substrate assay with chromozym TH. In the second series seven of these 13 patients were followed up between 3 and 12 months later and repeat assay performed. Both series of patients showed a significant fall in antithrombin III after stopping treatment (see Table) and this change was still present at 3-12 months follow-up. These findings are in agreement with the findings of Refvem and colleagues who also followed antithrombin III activities after stopping anticoagulant treatment. In our study we also performed the 125I fibrinogen scan during the eight-day period after stopping to ensure that changes were not due to rethrombosis during this period. None of the 20 patients studied showed positive scans.

We conclude that oral anticoagulants cause a true rise in antithrombin III activity. Measurements of antithrombin III were also carried out on days 1, 3 and 5 after stopping treatment. The mean fall in antithrombin III activity did not parallel the fall in prothrombin time nor activated partial thromboplastin time; but was maximal on day 8 after discontinuation. This suggests that this change is not an effect on synthesis as the turnover of antithrombin III is about 2-8 days, but on catabolism. We suggest that this increased destruction of antithrombin III is caused by increasing in vivo thrombin generation as the normal form of prothrombin is resynthesised when oral anticoagulants are discontinued.

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References


Accidental transplantation of tumour cells

In the February issue of your journal, Forbes et al., reported that "patients dying of malignant disease confined to the brain are the only cancer subjects who should be considered as sources of organs for transplantation."

We disagree with this opinion, as, from our own experience we find that it is extremely difficult to be absolutely certain that the tumour is confined to the brain, even after a very thorough necropsy of the donor. Although, it is still a widely accepted fact that visceral metastasis of central nervous system (CNS) tumours are an exception. Nevertheless, our own research has clearly demonstrated that all primary CNS tumours, regardless of their histological type, can cause extraneural metastasis. In 1977, we studied 248 observations of extraneural metastasis found in the world literature, which for the most part occurred from glioblastomas and astrocytomas. These studies consisted mainly of subjects who had undergone several craniotomies, but spontaneous metastases, which are sometimes the first
manifestation of CNS tumours were also present. Moreover, a personal unpublished case causes us great concern in using donors with a CNS tumour, as sources for organ transplantation. Briefly, in a 36-year-old male who was twice operated for a malignant cerebral astrocytoma, we discovered microscopic metastasis, in a rib sample, taken at random during necropsy. We detected glial fibrillary acidic protein in tumour cells using a technique that has already been published. This provided us with indisputable proof of astrocytic origin. We must insist on the fact that this rib had a normal macroscopic appearance and that there were no previous clinical or radiological manifestations to draw our attention to a possible metastasis. It is difficult to know if this microscopic astrocytic spreading would have given way to an apparent costal metastasis, or would have remained in a "dormant metastasis" state.

However, it seems to us, that whatever is possible for a rib is, unfortunately, also possible for a kidney. Therefore, even though to the best of our knowledge no primary CNS tumour has yet produced a metastasis in the recipient, it seems imperative to us to draw attention to such a possible outcome. In our opinion, using donors with CNS tumours as sources for organ transplantation, involves a risk to the recipient, of metastatic spread which cannot be completely eliminated.

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References

Classification of lymphoreticular malignancies

Trenchard et al. report a patient with angioimmunoblastic lymphadenopathy and immunoblastic leukaemia, the latter defined on the basis of "numerous immunoblasts in the peripheral blood." Leukaemia is a malignant proliferation of haematopoietic cells; these authors present no evidence to support the thesis that their patient had a neoplastic proliferation of immunoblasts. They used surface immunoglobulin as a marker of B cells in the peripheral blood yet make no comment as to whether this was monotypic (as expected in a neoplastic population) or polytypic (as expected in a reactive process). If leukaemia is identified on the criteria given in this paper is infectious mononucleosis diagnosed as leukaemia in Cardiff? The understanding and classification of lymphoreticular malignancies is bedevilled by semantic confusion. The loose use of the terms "immunoblastic leukaemia" and "immunoblastic sarcoma" does nothing to help this problem.

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Letters to the Editor


This book is one of a collection of monographs which deal with topics of current interest in dermatology. While the text has been enlarged the presentation of the book’s contents is essentially unchanged from that of the first edition written by Drs Noble and Somerville.

The author again reviews in detail the physicochemical properties of the skin, the complex nature of its microbial populations, and their changing patterns in health and disease. The chapters covering taxonomy and methods of identification are mainly relevant to the specialist while