concentration is frequently reduced in B12 deficiency (Hoffbrand et al., 1966), it should be made clear how many of the patients with a reduced red cell folate concentration were in fact B12 deficient. Certainly their statement that 'A low red cell folate is considered unequivocal evidence of folate deficiency' cannot be supported. Significant B12 and folate deficiency is a rare finding in patients with a normal MCV unless there is accompanying iron deficiency, chronic inflammatory disease, or malignancy. No mention of these factors is made by Raper and Choudhury in their patients with normal MCVs and a low red cell folate or B12 concentration, and hence any significance of their findings is masked.

The fact that 18 out of 40 patients with normal red cell folate concentrations and raised MCVs 'developed folic acid deficiency during the following six months' is not surprising, and an appraisal of blood film morphology and serum folate results together with bone marrow examination would have been appropriate. Perhaps more surprising was the finding of a normal B12 concentration in a patient with pernicious anaemia. There would certainly appear to be little justification for repeated red cell folate assays in these patients, as seems to be suggested by the authors.

There is still no substitute for a careful evaluation of the clinical and haematological findings in an individual case before requesting B12 or folate assays.

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The author comments as follows:

This laboratory is a regular contributor to the DHSS and BCSH Haematology Quality Assessment Trial and during the period of our study we submitted results on 40 blood samples supplied by the DHSS. On 38 out of the 40 samples our MCV result was within 1.8 standard deviations of the overall national mean obtained from the results submitted by all the laboratories. This means that our MCV is usually no more than 2 ft different from the national average.

Five of the 156 patients with a red cell folate of <170 ng/ml had a subnormal serum B12 level. We agree that significant B12 and folate deficiency is a rare finding in patients with a normal MCV unless

References


Early detection of folic acid deficiency in elderly patients

The recent paper by Raper and Choudhury (1978) is likely to lead to confusion and provoke unjustified requests for haematinics. Their method of assigning a mean red cell volume (MCV) to a specimen of blood relies on an arbitrary calibration of their Coulter 'S' by adjusting the MCV potentiometer to give a mean value of 89 fl based on a study of 250 blood donors. No justification for this method of calibration is given and the comparability with MCVs measured in other laboratories is highly suspect. The confusion is compounded by the patients being divided into groups with (a) red cell folate < 170 ng/ml, (b) B12 < 160 pg/ml and red cell folate > 170 ng/ml, and (c) red cell folate > 170 ng/ml and B12 > 160 pg/ml. As the red cell folate

cessing to xylol, and does not fade on storage after being mounted in DPX.

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Figure Formalin paraffin section of tonsil stained by the immunoperoxidase-PDP method for intracellular immunoglobulin (Haematoxylin × 800).