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Correspondence

Automated haemoglobinopathy screening

Sir, Daniel *et al.* (Clinical and Laboratory Haematology 2004, **26**, 21–24) have recently proposed a rule-based system for automatically analysing a number of parameters in order to detect the presence of a haemoglobinopathy. The analysis depends critically on the MCV and MCH but the methods by which the latter two were measured are not stated. This is important because the applicability of their analysis to other laboratories depends upon the equivalence of these parameters.

Each of the several systems available for measuring MCV within the laboratory will yield different results because of the nature of their methods for sphering, stabilizing and sizing red cells. Different counting systems will yield clinically significant different estimates of the MCV. This is reflected in the monthly reports of the UK General Haematology NEQAS Scheme. This shows, albeit in partially preserved red cell samples, huge variations between the methodologies in their estimate of the MCV.

In contrast, the MCH is independent of the technology used by the different counters available in haematology laboratories. This is reflected in the consistent equality in the results reported by the different technologies within the UK NEQAS schemes.

It is not clear from the report of Daniel *et al.* whether their analytical algorithm uses the MCV and MCH as alternatives. If it does, then others would be well advised to use the MCH and not depend upon the unproven equivalence of their MCV with that of the present authors. Indeed there is a case to be made for relegating the flexible MCV parameter as a measure of red cell size in favour of MCH.

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