

Dear Sir,

Re: Haematuria in the Diagnosis of Urinary Calculi  
SBS Ooi, NW Kour, A Mahadev  
Ann Acad Med Singapore 1998; 27:210-4

The above article highlights the insensitivity of urine microscopy compared with the Combur 9 test for detecting haematuria associated with urinary calculi. In the article, the equivalent microscopic RBC values for the Combur 9 are given as 5/ml (typo? it should be 5/ul) and 10 /ml (?10 /ul) for intact RBCs and haemoglobin respectively. However, in the study, Combur 9 was compared with a microscopic method using a sediment count (measured as RBC/hpf). Even taking into account the explanation that haemolysis may account for lower microscopic RBC counts, what the study probably shows is that urine microscopy using sediment count is inadequate. Laboratories should be using quantitative counts (expressed as RBCs/uul) measured by a counting chamber. This does not detract from the author's conclusion that the Combur 9 test is sufficient for detecting possible urinary calculi in the setting of the emergency department.

Sincerely,

Dr Raymond Lin  
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100 Bukit Timah Road  
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## Reply Letter

I apologise for the typographical error of pg 211 of the article. The practical sensitivity limit for the Combur 9 test is 5 RBCs/ul for intact RBCs (instead of /ml as printed in the article). The corresponding one for haemoglobin is 10 RBCs/ul instead of /ml.

Urine microscopy using the Microtitre Plate Sedimentation Method uses a larger volume of urine i.e. 300 ul of well-mixed (unspun) urine. In contrast, the counting chamber method only examines the RBC counts in 0.9 ul of urine! However, as the unit used in the counting chamber method is expressed in /ul, the RBC counts per unit volume is thus more accurate.

To my knowledge, Renal physicians generally prefer the RBC microscopic counts to be expressed in /ul whereas General physicians are more used to /hpf. To cater for both groups of physicians, our laboratory offers both methods of microscopic examination.

However, regardless of whether the RBC microscopic examination is done using the sedimentation or the counting chamber method, owing to transportation time, haemolysis will always be a factor. Hence, dipstix method using the Combur 9 test which measures haemolysed as well as intact RBCs will be a more sensitive bedside method.

Sincerely,

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## Erratum

Ann Acad Med Singapore 1998; 27:210-4

Haematuria in the Diagnosis of Urinary Calculi by SBS Ooi, NW Kour, A Mahadev

There are typographical errors on page 211 of the article. The practical sensitivity limit for the Combur 9 test is 5 RBCs/ul for intact RBCs (instead of /ml as printed). The corresponding one for haemoglobin is 10 RBCs/ul instead of /ml.

The errors are regretted.