Table 1. Clinical Details and Data on Purines

<table>
<thead>
<tr>
<th>Patient</th>
<th>Sex</th>
<th>Age at diagnosis</th>
<th>Reason for profile</th>
<th>Urate concn. µmol/L</th>
<th>Hypoxanthine concn. µmol/L</th>
<th>Xanthine concn. µmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.B. 6</td>
<td>♂</td>
<td>16</td>
<td>Anemia</td>
<td>Serum 20</td>
<td>Serum 19</td>
<td>Serum 22</td>
</tr>
<tr>
<td>K.B. 4</td>
<td>♀</td>
<td>35</td>
<td>Abdominal pain</td>
<td>20</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

<80 µmol/L) were followed up initially with urinary urate estimation. Of these, five showed normal urate excretion, suggesting a renal tubular etiology of the hypo-uricemia. The other two patients had a very low rate of urinary urate excretion, <20 µmol/L. Neither patient was on dietary purine restriction or was being treated with any xanthine oxidase inhibitor. Liquid-chromatographic analysis demonstrated greatly increased concentrations of xanthine and hypoxanthine in the blood and urine, thus confirming the diagnosis of hereditary xanthinuria (Table 1).

Deficiency of xanthine oxidase is a rare inborn error of purine metabolism. To date, fewer than 50 individuals with this disorder have been described in the literature, most of them Jewish (3–5). Because the condition is relatively benign, asymptomatic cases may remain undiagnosed and the true prevalence may be somewhat higher, although in a recent retrospective study of 47,420 patients no such cases were found (4). Early diagnosis permits therapy aimed at prevention of xanthine calculi to be begun, and avoidance of very vigorous exercise may decrease the deposition of xanthine crystals in muscle, thus diminishing the risk of development of myopathy (6).

References

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"Tandem ICON hCG" Urine Pregnancy Test Evaluated

To the Editor:
The Tandem ICON pregnancy test for detecting human chorionadotropin (hCG) in urine is a visual immunoenzymometric assay, produced by Hybritech, Inc., San Diego, CA 92121. The sensitivity of this filter-membrane method is stated to be 50 int. units/L and total assay time is 5 min.

We have evaluated the test on 241 urine specimens. Of these, 185 were from the walk-in pregnancy clinic of the Department of Gynecology and Obstetrics at the Milwaukee County Medical Complex, where they were analyzed fresh with either the Sensi-Tex (Roche Diagnostic Systems, Nutley, NJ 07100), the Tandem-Visual (Hybritech, Inc.) hCG urine pregnancy test, or both, according to the manufacturers’ instructions. The Sensi-Tex latex agglutination-inhibition test has a sensitivity of 250 int. units/L and a total assay time of about 90 min. The Tandem-Visual test has a sensitivity of 50 int. units/L and a total assay time of about 45 min. The remaining 56 urine specimens were from patients undergoing treatment in the infertility clinic at the Milwaukee County Medical Complex and were not analyzed with either the Tandem-Visual or Sensi-Tex assay.