Correspondence

Serum vitamin E in children with cystic fibrosis

<table>
<thead>
<tr>
<th>Ephynal (tablets)</th>
<th>Vitamin E (mg/kg per day)</th>
<th>No. of patients</th>
<th>Vitamin E (mg/100 ml serum)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 50 mg/wk</td>
<td>—</td>
<td>10</td>
<td>0.3 (0.1-0.6)</td>
</tr>
<tr>
<td>100 mg/dy</td>
<td>&gt; 3</td>
<td>5</td>
<td>0.7 (0.5-1.0)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2</td>
<td>7</td>
<td>1.0 (0.6-1.4)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2</td>
<td>6</td>
<td>0.2 (0.1-0.3)</td>
</tr>
<tr>
<td>200 mg/dy</td>
<td>&gt; 6</td>
<td>4</td>
<td>0.2 (0.1-0.3)</td>
</tr>
</tbody>
</table>

*Mean ± 1SD in 21 healthy children, 0.8 ± 0.2 mg/100 ml.

We have investigated changes in serum vitamin E concentration in response to differing doses (Ephynal tablets, Roche) in a group of 18 affected children aged 7 to 12 years (Table) using a modification of the method of Quaife, Scrimshaw, and Lowry (1949). The 2 x 50 mg/week dose was ineffective in all but 1 of the 10 children tested. We therefore increased the dose to 100 mg/day for all 18 children, and repeated serum estimations after 4 to 8 months. 13 children showed an increased serum vitamin E concentration, of these 7 had had low values before treatment and now had normal levels, and 6 children reached higher levels within the normal range. 5 children failed to respond to this dose; 4 of these patients were given 200 mg/day, but after 2 months or longer their serum levels remained low. The other child who failed to respond to 100 mg/day died in the course of this study. Another child also died, and he had shown a satisfactory increase in serum vitamin E (pretreatment serum level 0.1 mg/100 ml, and 0.7 mg/100 ml when treated with 100 mg/day Ephynal). The patients whose serum vitamin E failed to respond to oral therapy did not differ from the rest of the group in terms of height and weight centiles, bowel symptoms, or chest status.

Thus when vitamin E (100 mg/day) is given to children with cystic fibrosis, normal serum levels are achieved in most patients. Those not responding to 100 mg/day fail to respond to 200 mg/day.

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We are grateful to Susan Mullen for vitamin E determinations, to Roche Ltd. for financial assistance, and to Dr. A. P. Norman for allowing us to study his patients.

Hydroxyproline excretion

Sir,

In their article ‘Hydroxyproline excretion in various forms of growth failure’ (Archives, 1973, 48, 127) Teller et al. comment on our comparable study by stating (p. 130), ‘Van Gemund et al. (1967) reported a relation between hydroxyproline excretion of normal children and patients with endocrine and non-endocrine growth failure similar to our own findings, though they did not give a hydroxyproline-free diet, nor express their values in terms of mg hydroxyproline/24 hr per m²’.

We think it necessary to inform the interested reader that we explicitly formulated the administration of a gelatine-free diet as well as the expression of our results on normal children as mg hydroxyproline/24 hr per m². The Table is taken from our published report.

<table>
<thead>
<tr>
<th>24 hr</th>
<th>mg</th>
<th>mg/m²</th>
<th>mg/cm</th>
<th>mg/kg</th>
<th>mg/g creatinine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>51.5</td>
<td>60.6</td>
<td>0.44</td>
<td>2.29</td>
<td>134</td>
</tr>
<tr>
<td>SD</td>
<td>13.3</td>
<td>9.5</td>
<td>0.10</td>
<td>0.57</td>
<td>35</td>
</tr>
</tbody>
</table>

Moreover, we would like to emphasize that, because of the variable urinary excretion ratio of OHP/creatinine in

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5 children, we did not generally advocate the use of random samples.

J. J. van GEMUND, P. M. A. VIO, and M. A. H. GIESBERTS
Department of Paediatrics,
University Hospital,
Leiden, The Netherlands.

REFERENCE

De klinische betekenis van de hydroxyproline-uitscheiding in de urine bij kinderen. (The significance of urinary hydroxyproline excretion in children.) Maandschrift voor Kinder geneeskunde, 38, 387 (Dutch; graphs and summary in English).

Professor W. M. Teller replies 'We have no comments except for apologies'. Editors.

Society for Ear, Nose and Throat Advances in Children

A new interdisciplinary society, the Society for Ear, Nose and Throat Advances in Children (SENTAC), was founded on 3 February 1973. The primary purposes of the Society in its designated areas of interest are (1) to promote improvements in the quality of care, (2) to stimulate and foster research, and (3) to encourage and facilitate scientific exchange, liaison, and coordination among professionals from various concerned disciplines.

Elected as initial Directors of the Society were Dr. Robert J. Ruben, Albert Einstein College of Medicine, President; Dr. Sylvan E. Stool, University of Pennsylvania School of Medicine, Vice-President; Dr. Jack L. Paradise, University of Pittsburgh School of Medicine, Secretary-Treasurer; and Laura A. Wilber, Ph.D. Albert Einstein College of Medicine. Applications for membership in SENTAC are invited from otolaryngologists, paediatricians, audiologists, speech pathologists, and other interested individuals.

The first annual meeting of the Society will be held in Toronto, Ontario, at The Hospital for Sick Children, on 9 and 10 October 1973.

Individuals interested in applying for membership, or for additional information concerning the annual meeting, should write to Dr. Jack L. Paradise, Secretary-Treasurer, SENTAC, Children's Hospital of Pittsburgh, 125 De Soto Street, Pittsburgh, Pa. 15213, U.S.A.
Hydroxyproline excretion

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