Letters to the Editor

A prerequisite for adequate follicular development is a normal luteinizing hormone (LH) pulse pattern. This can be very precisely analysed by pulse studies. From every study person 145 blood samples were collected and pulse analysis was carried out using a computer program. Thus the study result was based on thousands of endocrine data. The method of pulse analysis we employed is accepted in endocrinology. Large numbers of study persons are desirable, but not practicable and not required.

We did not perform abundant, but serial blood sample collection. Moncayo and Moncayo should know that nowadays pulse analysis cannot be done using a few blood samples.

References


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Thyroid function and human reproduction

Dear Sir,

In a recent report, subclinical hypothyroidism ‘in gynaecological practice’ was defined by stimulated thyroid stimulating hormone (TSH) values of >15 µIU/ml in the presence of normal thyroxine and triiodothyronine concentrations (Bals-Pratsch et al., 1997). However, none of the three papers quoted by the authors in this respect (Franklyn, 1955; Hoff and Olbricht, 1988; Lazarus, 1996) substantiates this definition. This is hardly surprising since 15 µIU/ml is very close to the mean TRH-stimulated TSH secretion in euthyroid women (Table I). The ‘gynaecological definition’ of subclinical hypothyroidism seems to originate from 1981, when Bohnet et al. have employed it when ‘either basal TSH was >3.0 µIU/ml with a peak response of >15 µIU/ml’ or when the ‘change in TSH exceeded 20 µIU/ml’. This partially contradictory and hence obviously erroneous definition of subclinical hypothyroidism (though not further substantiated either by Bohnet et al. or elsewhere) has since been used in the gynaecological literature; indeed, even a TRH-induced rise in TSH by only 12.5 µIU/ml has been employed to describe this condition (Bals-Patsch et al., 1993). The few women recently studied by Bals-Patsch et al. (1997) all had a stimulated TSH concentration of >20 µIU/ml and thus the conclusions of their paper may still be correct. But given the potential implications for a large number of healthy women I would like to urge those who believe in the ‘gynaecological definition’ of subclinical hypothyroidism once and for all to either provide the pertinent data or to reconsider.

Table I. Serum concentrations of thyroid stimulating hormone (TSH) (µIU/ml) before and 20 min after i.v. TRH in healthy women (age <40 years)

<table>
<thead>
<tr>
<th>n</th>
<th>Diagnosis</th>
<th>TSH (basal)</th>
<th>TSH (stimulated)</th>
<th>TSH (above basal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>Euthyroidism</td>
<td>1.8 ± 0.9</td>
<td>14.3 ± 6.2</td>
<td>12.6 ± 5.6</td>
</tr>
<tr>
<td>27</td>
<td>Subclinical hypothyroidism TSH [basal] &lt;4.0</td>
<td>3.1 ± 0.7</td>
<td>32.7 ± 4.2</td>
<td>29.7 ± 4.1</td>
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<tr>
<td></td>
<td>TSH [stim.] &gt;20.0</td>
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References


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