and a sonographic picture of polycystic ovaries but with no phenotypic abnormalities or signs of hyperandrogenism, to advanced Stein and Leventhal syndrome (Stein and Leventhal, 1935) and its associated long-term sequelae, namely endometrial carcinoma, hypertension, diabetes mellitus and cardiovascular disease. Moreover, the pathophysiology of PCOS is not completely understood and its aetiology remains an enigma.

Recently two debate articles in this Journal (Balen and Michelmore, 2002; Homburg, 2002) have tried to re-explore the definitions of PCOS, proposed a practical working definition and invited contributions which could form the basis for an international consensus. We therefore decided to present our view on this symptom complex (Ben Rafael and Orvieto, 2000), which includes an alternative approach based on the reclassification of syndrome.

### Classifications of polycystic ovary syndrome

The large spectrum of clinical manifestations in PCOS, probably due to a wide range of causes, led several investigators to suggest new subclassifications for this syndrome with different results (Acien et al, 1999; Azziz et al, 1999; Gennarelli et al, 1999; Kondoh et al, 1999; Homburg, 2002). The discrepancies between the reports are probably due to the different criteria used to define the syndrome (Balen and Michelmore, 2002) and the possibility that this symptom complex is the end result of a multifactorial aetiology. Therefore, and since the severity of the clinical features of PCOS may be influenced by intra- or extra-ovarian factors, we have offered a simplified approach to PCOS based on a different classification (Ben Rafael and Orvieto, 2000). The classification is based on the typical clinical features of PCOS and their percent frequencies as summarized by Franks (Franks, 1995). Table I lists the major and minor criteria according to the specificity of each feature. While the presence of one minor criterion suggests a tendency for PCOS, the presence of two minor criteria would suggest a mild form of PCOS. Furthermore, the presence of one major and one minor criterion, or one or more major and two or more minor criteria would indicate moderate or severe forms of PCOS respectively.

### Polycystic ovary syndrome: a simplified approach based on the evolving set of symptoms

Dear Sir,

Polycystic ovary syndrome (PCOS) is the most common endocrinopathy among women of reproductive age. It has no single accepted definition, though the most widely used indicator is the presence of typical ultrasound features of the polycystic ovaries (Adams et al., 1985) in association with hyperandrogenism and/or chronic anovulation in women without specific underlying disease of the adrenal or pituitary glands. The clinical presentation varies from eumenorrhea and a sonographic picture of polycystic ovaries but with no phenotypic abnormalities or signs of hyperandrogenism, to advanced Stein and Leventhal syndrome (Stein and Leventhal, 1935) and its associated long-term sequelae, namely endometrial carcinoma, hypertension, diabetes mellitus and cardiovascular disease. Moreover, the pathophysiology of PCOS is not completely understood and its aetiology remains an enigma.

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<table>
<thead>
<tr>
<th>Major criteria</th>
<th>Minor criteria</th>
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<tbody>
<tr>
<td>Anovulation</td>
<td>Polycystic ovaries on ultrasound</td>
</tr>
<tr>
<td>Oligo-amenorrhea</td>
<td>Elevated luteinizing hormone/follicle stimulating hormone</td>
</tr>
<tr>
<td>Hyperandrogenism</td>
<td>Acne</td>
</tr>
<tr>
<td>Severe hirsutism</td>
<td>Mild hirsutism</td>
</tr>
<tr>
<td>Insulin resistance</td>
<td>Obesity</td>
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</tbody>
</table>

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treatment whereas those with the mild to severe forms should be treated medically. The goal of therapy in moderate to severe PCOS should be to reverse or reduce the severity of the clinical symptoms with maintenance of the patient within the tendency-form range of PCOS. This clinical approach is in agreement with Balen and Michelmore (2002) who concluded that management should be directed toward the individual’s needs with an attempt to avert the present and late sequelae of PCOS.

References


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