



Working Group on the Organization and  
Methodology of Endocrinology Laboratories

Bonn, 25-28 November 1980



INDEXED

ICP/ATH 006/7  
30 September 1980

ORIGINAL: ENGLISH

CLINICAL RELEVANCE OF TESTS IN CURRENT USE

by  
Dr M. Koçak  
University of Çukurova, Faculty of Medicine  
Adana, Turkey

Endocrinology has become one of the most exact disciplines in medicine with today's precise laboratory methods which allow us to quantitate subtle hormonal abnormalities.

Usually multiple measurements and/or suppression and stimulation tests are necessary in the management and diagnosis of hormonal disorders. A single measurement is rarely enough to give confidence, no matter how accurate.

Some of the endocrine tests are most useful and almost mandatory in establishing the diagnosis. Others are not yet practical enough to be useful in everyday practice.

With regard to pituitary hormones, measurement of growth hormone, ACTH, TSH and gonadotrophins using dynamic tests usually confirms the diagnosis of adenohipophyseal insufficiencies. Diagnosis of selective deficiencies of the pituitary hormones can be established by measuring each of them. Although the basal levels of GH are elevated in about 90-95% of patients with acromegaly, basal GH levels do not correlate with clinical manifestations. Failure of GH to suppress after a 100 g glucose load is the most consistent abnormality. Measurement of prolactin level in those patients with galactorrhoea - amenorrhoea syndrome, who may or may not have pituitary tumour, is very useful in diagnosis and management. An elevated level of prolactin is found in most women who have galactorrhoea - amenorrhoea syndrome.

Measurements of T resin uptakes and TSH are usually necessary and adequate in evaluating hypo or hyperfunction of the thyroid gland.

Diagnosis and differential diagnosis of hypercorticalisms and adrenal hypofunction can be made satisfactorily by measurement of cortisol and ACTH using appropriate dynamic tests.

Aldosterone measurement is quite helpful in diagnosis of primary hyperaldosteronisms.

In reproductive endocrinology, determinations of gonadotrophins, testosterone, oestradiol and 17-ketosteroids are useful procedures.

Current parathormone and catecholamines assays are not very useful in clinical practice.

Insulin assay is mainly used in research rather than clinical practice.

The issue of this document does not constitute formal publication. It should not be reviewed, abstracted or quoted without the agreement of the World Health Organization Regional Office for Europe. Authors alone are responsible for views expressed in signed articles.

Dieses Dokument erscheint nicht als formelle Veröffentlichung. Es darf nur mit Genehmigung des Regionalbüros für Europa der Weltgesundheitsorganisation besprochen, in Kurzfassung gebracht oder zitiert werden. Beiträge, die mit Namensunterschrift erscheinen, geben ausschliesslich die Meinung des Autors wieder.

Ce document ne constitue pas une publication. Il ne doit faire l'objet d'aucun compte rendu ou résumé ni d'aucune citation sans l'autorisation du Bureau régional de l'Europe de l'Organisation Mondiale de la Santé. Les opinions exprimées dans les articles signés n'engagent que leurs auteurs.

Настоящий документ не является официальной публикацией. Не разрешается рецензировать, аннотировать или цитировать этот документ без согласия Европейского регионального бюро Всемирной организации здравоохранения. Все ответственность за взгляды, выраженные в подписанных авторами статьях, несут сами авторы.