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Adrenocortical function in Nigerian patients with pulmonary tuberculosis (PTB).

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Abstract

Addison's disease was frequently consequent upon affectation of the glands by tuberculosis. Pulmonary Tuberculosis (PTB) is still very common in Nigeria but no report on the functional status of the adrenal cortex in patients with PTB in Nigeria exists. It is very important to note that subclinical adrenocortical failure in tuberculosis is an entity that should be considered as cortisol deficiency could be responsible for unexpected sudden death in this category of patients. This study sets out to determine the prevalence of subclinical adrenocortical failure in persons with PTB by determining the response to low-dose (1 ìg) ACTH stimulation. Forty four persons with newly diagnosed sputum-positive PTB and treatment naive, (23 males and 21 females, mean age 34.4 +/- 11.3 years, and mean body mass index (BMI) of 18.9 +/- 2.9 kg/m2) completed the study. Of the one hundred healthy volunteers recruited as control subjects, 70 persons (35 males and 35 females, mean age 38.1 +/- 12.5 years, BMI 24.1 +/- 3.7 kg/m2) completed the exercise. There was no statistically significant difference in the basal cortisol of healthy subjects and persons with PTB (239.9 vs. 229.1 nmol/L, p = 0.661). The thirty minute response to ACTH stimulation test and increment were significantly lower in persons with PTB than in healthy subjects. Adrenocortical insufficiency, mostly at the subclinical level, is common in persons with PTB infection, occurring in about 23% of patients. We therefore recommend that basal cortisol levels should not be used to detect adrenocortical insufficiency; rather stimulation tests should be used to

exclude or confirm suspected adrenocortical insufficiency in patients with PTB.

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MeSH terms, Substances

LinkOut - more resources

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