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Clinical burnout is not reflected in the cortisol awakening response, the day-curve or the response to a low-dose dexamethasone suppression test

Further evidence that cortisol levels are an unreliable witness for stress, undermining earlier confidence in their role in disease causation, related to stress.

The potential for stress to have an effect on the endocrine system has encouraged researchers to draw conclusions about how stress causes physical ill health. In particular they point to the role of cortisol in the disease process; early studies showed that cortisol levels were abnormal in people who complained of stress. Subsequently this clarity has been gradually eroded to the extent where in our view there is no clear support for an effect of stress on cortisol levels. Without changes in cortisol levels the mechanism linking stress to serious ill health becomes more tenuous.

No single study can significantly change this position.

The present study looked for cortisol disturbances in people with an extreme stress reaction known as burnout. The burnout syndrome is characterized by excessive exhaustion, a cynical work attitude and feelings of reduced competence. It is measured in a very specific way, making it quite distinct from general stress reactions.

Seventy five burnout cases were compared with thirty five controls.

The cortisol response upon waking was identical in both groups as was the response to dexamethasone (the test here is of the responsiveness of the endocrine system).

Comment

The study was unable to find any effect of burnout on the magnitude and variability of cortisol levels. This confirms a growing view that cortisol is not a reliable feature of the stress/illness landscape.