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Plasma thyrotropin and duration of the ECT-induced seizures

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In contrast to other neuroendocrine events, such as prolactin secretion, plasma thyrotropin (TSH) during seizure activity has not been systematically studied. Recently, use of sensitive TSH assays made possible the demonstration of a small, but significant, TSH increase during ECT.

In this study, we further pursue the issue of the relationship between TSH and seizure activity. Plasma TSH was assessed during the first ECT session in 15 female, drug-free patients (10 depressives and 5 schizophrenics) undergoing treatment with ECT. It was found that the baseline TSH, but not the TSH response to ECT, was positively correlated (r = 0.76; p < 0.001) to the duration of the clinically (cuff method) and electrophysiologically (EEG)-monitored seizure.

These findings offer another hint linking thyroid and seizure activity.

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Dopaminergic function in panic disorder

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Several lines of evidence suggest that dopamine might be involved in anxiety states. However, the dopaminergic function has not been previously evaluated in panic disorder.

In our study, we assessed the growth hormone (GH) response to apomorphine (a dopaminergic agonist) 0.5 mg sc in 9 drug-free inpatients meeting Research Diagnostic Criteria for panic disorder who were age- and sex-matched with 9 major depressive and 9 minor depressive inpatients.

The 3 groups differed significantly in their GH peak response: (mean \pm SD) 5.29 \pm 2.75 ng/ml in major depressives, 26.27 \pm 12.71 in minor depressives, and 37.28 \pm 10.58 in panics, with a significantly higher response (p < 0.03) in panics than in either minor or major depressive patients.

Therefore, these results support dopaminergic overactivity in panic disorder.