Endocrine Abnormalities in Autism

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Abstract

Autism is an early onset disorder characterized by language delay, socio-emotional deficits, and repetitive behavior, often accompanied by anxiety. The neuroendocrine abnormalities of autism, less well known, are disturbances of the brain-adrenal, -gonadal and -gut axes, accompanied by immunological and gastrointestinal dysfunction. Subtle changes are seen in the regulation of cortisol, oxytocin and androgens. Brain abnormalities are most consistently in the hippocampus and amygdala, limbic regions implicated in central control of body physiology. Impaired immunity predisposes to infection, particularly in the gastrointestinal tract, that can feed back to the limbic brain to exacerbate behavioural and systemic problems. Remedial therapy of physiological impairments including infection is likely to improve outcome.

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