Abstract
To evaluate 5-hydroxytryptamine1A receptor responsivity in obsessive-compulsive disorder, we examined hypothermic, neuroendocrine, and behavioral responses to the selective 5-hydroxytryptamine1A receptor ligand ipsapirone in patients with primary obsessive-compulsive disorder and healthy controls. Twelve patients and 22 controls received a single dose of ipsapirone, 0.3 mg/kg, or placebo under double-blind, random assignment conditions. Ipsapirone induced hypothermia and release of corticotropin and cortisol but had no effect on behavior, including obsessive or compulsive symptoms. Thermoregulatory and neuroendocrine responses to ipsapirone were not consistently different between healthy controls and patients with obsessive-compulsive disorder. These results provide no direct support for the hypothesis that a serotonergic dysfunction related to 5-hydroxytryptamine1A receptors may be linked to the pathophysiologic characteristics of obsessive-compulsive disorder and point to the need for the evaluation of other 5-hydroxytryptamine receptor subtypes. Future studies of the responsivity of 5-hydroxytryptamine1A receptors to direct-acting ligands, such as ipsapirone, should facilitate assessment of the integrity of the 5-hydroxytryptamine system and its involvement in antiobsessional drug effects.