

Hypophysial hormone secretion induced by lipopolysaccharide in rats:

Involvement of the anteroventral third ventricle region

withdrawn by authors

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Summary

During the early phase of endotoxic shock the hypothalamic activation induced an increase in hypophyseal hormone secretion. This study examined whether electrolytic ablation of the periventricular anteroventral third ventricle (AV3V) region would affect the increase of hypophyseal hormone secretion induced by systemic injection of lipopolysaccharide (LPS, 1.5 mg/kg, i.v.) in rats. LPS significantly increased plasma levels of vasopressin, oxytocin, adrenocorticotropin and corticosterone ($P<0.05$). AV3V lesion significantly reduced LPS-induced hypophyseal hormone secretion ($P<0.05$). These findings demonstrate that LPS-induced activation of hypothalamus and hypophyseal hormone secretion is dependent on the integrity of the AV3V region.

Keywords: Vasopressin; Oxytocin; Adrenocorticotropin, Corticosterone; Sepsis; Stress