A Case of Isolated Adrenocorticotropic Hormone Deficiency Presenting with Gastrointestinal Symptoms

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Isolated ACTH (adrenocorticotropic hormone) deficiency is a rare cause of secondary adrenocortical insufficiency. The clinical features of secondary adrenal insufficiency differ from those of primary adrenocortical insufficiency in that pituitary secretion of ACTH and β-lipotropin is deficient and thus hypersegmentation is not present. Prominent features are weakness, lethargy, easy fatigability, anorexia, nausea, and occasionally vomiting. Volume depletion, dehydration, and electrolyte abnormalities are rarely observed. Usually, hypotension is not present except in acute presentations. Recently, we experienced a 48-year-old woman admitted because of nausea, vomiting, and diarrhea. The level of basal plasma cortisol was low, and the level of plasma ACTH and cortisol decreased responding to combined pituitary stimulation test. Plasma ACTH concentration remained low even after intravenous injection of corticotropin releasing factor. It suggested that the defect of ACTH secretion was apparently due to intrinsic pituitary dysfunction rather than hypothalamic disease. Brain magnetic resonance imaging failed to reveal any radiological abnormalities of the sellar or suprasellar area. (Kor J Gastroenterol 1999;33:129 - 134)

Key Words: Isolated ACTH deficiency
Fig. 1. Esophagastroduodenoscopic finding. Esophagastroduodenoscopic finding shows no specific gross abnormality except duodenitis.

Fig. 2. Colonoscopic finding. Colonoscopic finding shows no specific gross abnormality.

Fig. 3. MRI finding. Brain MRI shows no gross abnormality.