

中文題目：腎上腺功能不全引起之完全性房室阻斷 - 一病例報告

英文題目：Adrenal insufficiency induced complete atrioventricular block – A Case Report

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### **Background:**

Complete atrioventricular block (CAVB) is defined as an interruption in the transmission of an impulse from the atria to the ventricles due to an anatomical or functional impairment in the conduction system (1). The common etiologies of CAVB are ischemic heart disease, increased vagal tone, fibrosis and sclerosis of the conduction system, cardiomyopathy, myocarditis, medication or iatrogenic cause (2-5). We reported a rare case of adrenal insufficiency induced CAVB, which was improved by administration of cortisone acetate.

### **Case Report:**

A 57-year-old female suffered from progressive bilateral lower legs edema for 1 week. There is no chest discomfort noticed. She also suffered from poor appetite for 1 week. She has no family history of cardiovascular disease and arrhythmia.

Bradycardia was noticed on physical examination. Variable intensity of S1 and intermittent cannon A waves were found on cardiac examination. Her baseline 12-lead electrocardiogram revealed CAVB and transvenous pacing was done. No electrolyte abnormality nor elevated cardiac TnI were found in her blood test. Thus, she was admitted under the impression of CAVB.

After admission, normal ventricular function without pericardial effusion was found on echocardiography but her blood test showed immeasurable cortisol level. Series blood test favored the drug-related (iatrogenic) Cushing syndrome. Thus, we prescribed the physiological dose of cortisone acetate for her. After the supply of cortisone, the CAVB improved and returned to normal sinus rhythm. However, 2:1 atrioventricular block was found on Holter electrocardiogram thereafter. So we arranged electrophysiology study for her and which revealed supra-His block. Atropine was given but had no effect on the atrial rate and the atrioventricular conduction. Hydrocortisone was also given which can increase the atrial rate but not the atrioventricular conduction. The pacemaker was suggested due to bradycardia with the 2:1 atrioventricular block. The patient had no willing to receive pacemaker implantation so she was discharged.

### **Conclusions:**

We demonstrated a rare case with adrenal insufficiency induced CAVB, which would be improved after steroid treatment. Although only a few cases were reported to be associated with, the adrenal insufficiency might be an etiology for CAVB and could be treated with

cortisone supply without the pacemaker.

**Reference:**

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