Adrenal insufficiency due to Rathke cleft cyst hemorrhage, with sudden-onset headache followed by recurrent generalized symptoms

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INTRODUCTION
Many cases of Rathke cleft cyst (RCC) are asymptomatic. When it gets larger, it causes headache, vision abnormality, hypopituitary dysfunction. The most of symptoms of adrenal insufficiency (AI) are nonspecific, therefore, diagnosis may be difficult in its early stage. We report the case of AI due to RCC hemorrhage, in which medical history help for the diagnosis.

CASE DESCRIPTION
A 61-year-old farmer man referred to our hospital for a 5-month history of recurrent fever. He had sudden headache and bitemporal blinking light 4 month ago. Although the headache disappeared quickly, the visual symptoms remained about a month. From that time, he recognized large joint pain, fatigue, anorexia, and weight loss of 7 kg. These symptoms often occur on the day after doing agricultural work, and spontaneously resolved within 2-3 days. His vital signs were as follows: temperature, 36.6°C; pulse, 74 per minute; and blood pressure, 80/52 mmHg. The range of motion of the joints and visual field were normal. Laboratory tests showed no abnormality of electrolyte nor evidence of inflammation. We considered AI from a history of nonspecific joint pain, anorexia, weight loss, hypotension and fever triggered by physical stress, and a pituitary stroke from sudden headache with bitemporal visual field disturbance. The workup revealed a decreased morning serum cortisol level (3.1 mcg/dL, normal: 5.0-25.0). In the magnetic resonance imaging of head, there was a RCC at the Turkish saddle. Treatment was initiated using oral prednisolone (20 mg per day), which rapidly resolved his symptoms in a day.

DISCUSSION
It was assumed that he originally had a RCC, which caused secondary AI, and worsened at a stroke by the subsequent intracystic hemorrhage. The Systemic symptoms after sudden headache considers secondary AI associated with pituitary stroke.