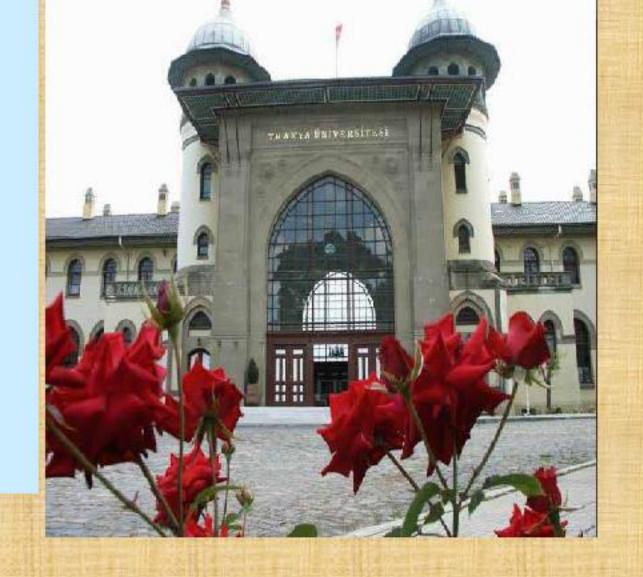


Pituitary Apoplexy Case Caused by Hanta Virus Infection



Semra Aytürk¹, Ahmet Bilal Genç², Selçuk Yaylacı², Oğuz Karabay³, Ali Tamer², Mehmet Çelik ¹

Trakya University Faculty of Medicine, Department of Endocrinology and Metabolism ¹
Sakarya Education and Research Hospital, Department of Internal Medicine²
Sakarya University Faculty of Medicine, Department of Clinical Microbiology and Infectious Diseases³

Introduction: Pituitary apoplexy (PA) is a rare but life-threatening medical emergency. Common predisposing factors include closed head trauma, blood pressure alterations, history of pituitary irradiation, cardiac surgery, anticoagulation, treatment with dopamine agonists, pituitary stimulation testing, and pregnancy. Hantaviruses belonging to the Bunyaviridae family are a group of rodent- or insectivore-borne single-strand ribonucleic acid (RNA) viruses. In humans, hantaviruses can cause haemorrhagic fever with renal syndrome or cardiopulmonary syndrome. About one third of the patients may occur bleeding in the brain, conjunctiva or gastrointestinal tract. Pituitary hemorrhage due to pituitary insufficiency have also been reported.

Case: We report the case of a patient, who the 62- years old man was admitted to the emergency department with complaints of fever, severe headache and confusion. There was no disease in his history. He had not taken any medication or had bleeding disorder prior to this presentation. Leukopenia, thrombocytopenia, elevated liver enzymes and creatinine and panhypopituitarizm was detected in laboratory investigations at intensive care. The patient underwent hemodialisis and stress-dose methylprednisolone was started. Because of fever, acut renal failure and thrombocytopenia etiology were thought to be viral infections.

Serum sample of the patient was sent to National Reference Virology Laboratory for IFA and immunoblot test which revealed hantavirus IgM and IgG antibodies. Hantavirus seropositivity was determined by two tests.

Magnetic resonance imaging revealed sella and suprasellar mass (22×23×30 mm) with evidence of acute hemorrhage and diagnosed as PA. The patient underwent transsphenoidal surgery. Histopathologic examination showed signs of recent bleeding.

Twelve months after surgery, the patient with persisten hypopituitarism is given steroid, L-thyroxine and testosterone treatment.

Conclusion: Thus, physicians should suspect PA in a patient with hemorrhagic fever who develops a rapid onset of severe headache, even in a patient without a known pituitary adenoma.

Figure 1: Pituitary MRI revealed sella and suprasellar mass with evidence of acute hemorrhage

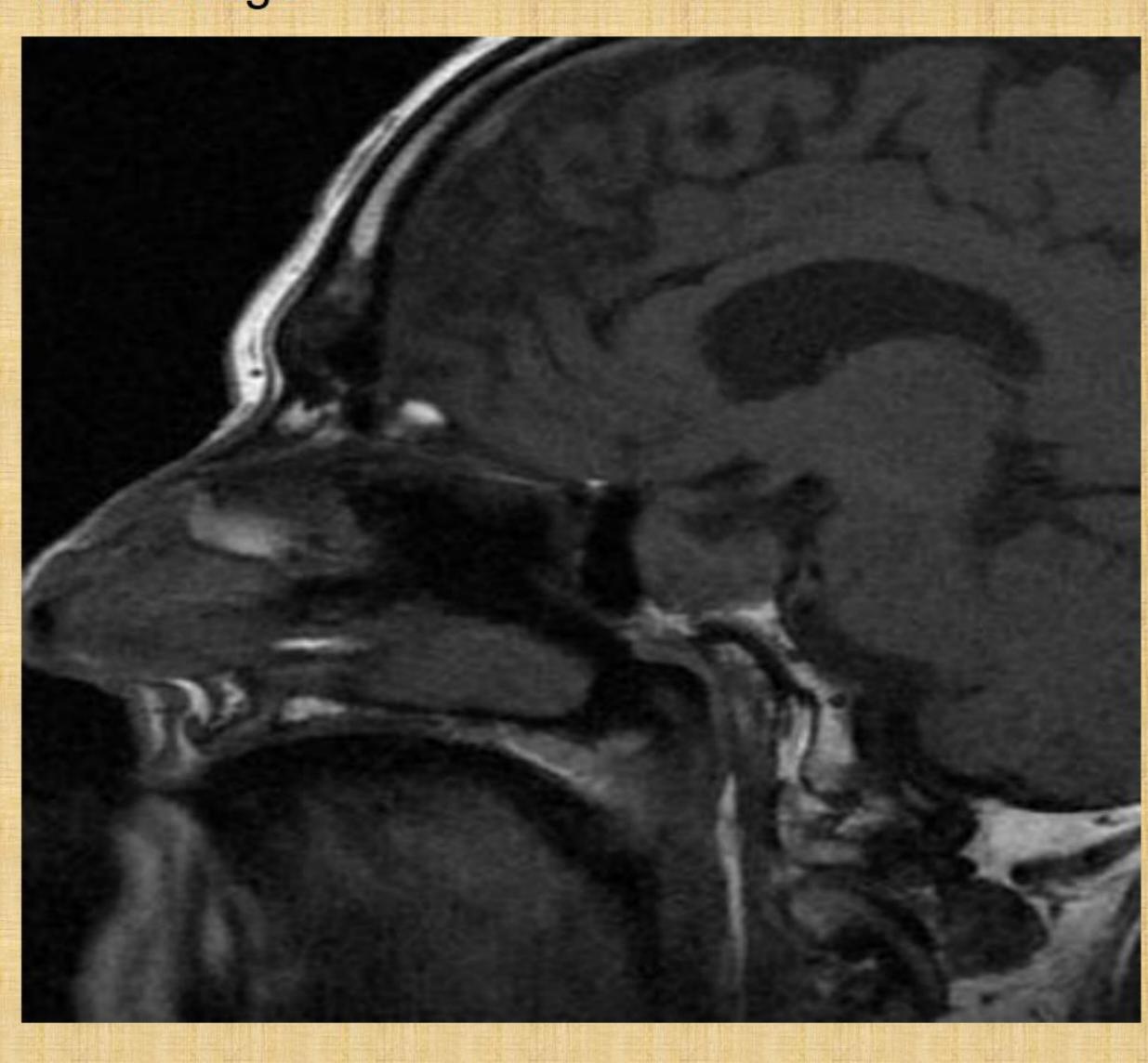


Table 1: Laboratory results of patient basal and 12 months later

	Basal	12 months later
Hb (12.2-18.1 g/dl)	12.5	14.4
WBC (4.6-10.2 K/u/L	12.800	11.800
Plt (142000-424000 K/u/L	57600	260000
Urea (16.6-48.5 mg/dl)	117	12
Cr (0.7-1.2 mg/dl)	6	1.1
Na (136-145 mmol/L)	133	144
K (3.5-5.1 mmol/L)	5.9	4.9
ESR (0-22 mm/h)	15	17
CRP (0-5 mg/L)	190	2
ALT (0-40 IU/L)	38	14
AST (10-42 IU/L)	171	27
Glucose (70-105 mg/dl)	42	96
INR	1.13	
APTT (22.7-31.8)	45.4	
fT4 (9.01-18.02 pmol/L)	5.15	13.3
fT3 (2.63-5.70 pmol/L)	1.54	3.91
TSH (0.35-4.94 µIU/ml)	0.0028	0.063
Cortisol (3.7-19.4 µg/dl)	0.01	0
ACTH (5-60 pg/ml)	21.5	9.82
Prolactin (1.29-29.9 ng/ml	1.43	0.92
LH (1.78-92.1 mIU/ml)	0.08	0.16
FSH (2.58-150.5 mIU/ml)	0.38	0.35
Testosterone (1.56-5.63 ng/ml)	0.58	4.2
	WBC (4.6-10.2 K/u/L Plt (142000-424000 K/u/L Urea (16.6-48.5 mg/dl) Cr (0.7-1.2 mg/dl) Na (136-145 mmol/L) K (3.5-5.1 mmol/L) ESR (0-22 mm/h) CRP (0-5 mg/L) ALT (0-40 IU/L) AST (10-42 IU/L) Glucose (70-105 mg/dl) INR APTT (22.7-31.8) fT4 (9.01-18.02 pmol/L) TSH (0.35-4.94 μIU/ml) Cortisol (3.7-19.4 μg/dl) ACTH (5-60 pg/ml) Prolactin (1.29-29.9 ng/ml LH (1.78-92.1 mIU/ml) FSH (2.58-150.5 mIU/ml)	Hb (12.2-18.1 g/dl) WBC (4.6-10.2 K/u/L Plt (142000-424000 K/u/L Urea (16.6-48.5 mg/dl) Cr (0.7-1.2 mg/dl) Na (136-145 mmol/L) ESR (0-22 mm/h) CRP (0-5 mg/L) ALT (0-40 IU/L) Glucose (70-105 mg/dl) INR 1.13 APTT (22.7-31.8) T3 (2.63-5.70 pmol/L) TSH (0.35-4.94 μIU/ml) Cortisol (3.7-19.4 μg/dl) ACTH (5-60 pg/ml) Prolactin (1.29-29.9 ng/ml LH (1.78-92.1 mIU/ml) D12.5 12.800 12.800 117 117 117 118 119 12.5 12.800 117 12.800 117 12.800 117 12.800 117 12.800 117 133 45.9 45.9 45.9 45.9 1.54 TSH (0.35-4.94 μIU/ml) 0.0028 Cortisol (3.7-19.4 μg/dl) ACTH (5-60 pg/ml) Prolactin (1.29-29.9 ng/ml LH (1.78-92.1 mIU/ml) 0.08 FSH (2.58-150.5 mIU/ml) 0.38





