

LETTER TO THE EDITOR

Unusual presentation of hypophysitis preceding an empty sella in a 75-year-old woman

Johannes Klein & Horst L. Fehm

Department of Internal Medicine I, University of Lübeck, Germany.

Correspondence to: Dr. Johannes Klein
Department of Internal Medicine I
Medical University of Lübeck
Ratzeburger Allee 160, 23538 Lübeck, GERMANY
TEL.: +49 451 500 2863
FAX: +49 451 500 4193
EMAIL: j.klein@uni-luebeck.de

Submitted: September 20, 2005

Accepted: September 21, 2005

Key words: **dural tail sign; elderly; empty sella; fatigue; hypophysitis**

Neuroendocrinol Lett 2005;26(6):757-758 PMID: 16380671 NEL260605A01 © Neuroendocrinology Letters www.nel.edu

Abstract

A 75-year-old woman complained about progressing fatigue. She appeared somnolent, but fully oriented and in no acute distress. Her face was pale and puffy. She did not show any signs of focal neurological disease, and the remainder of the physical examination was unrevealing. Routine laboratory tests were unremarkable except for hyponatremia and mildly decreased levels of free T3 and free T4, with TSH in the normal range. Pituitary function tests demonstrated secondary adrenal insufficiency and hypothyroidism. Magnetic resonance imaging (MRI) unmasked hypophysitis with the characteristic findings of homogeneous gadolinium uptake of the pituitary and a prominent pituitary stalk ('dural tail sign', arrows in Fig. 1 A and B, sagittal and coronal views). Substitution of hydrocortisone and levothyroxine resulted in rapid and sustained improvement of all symptoms and normalisation of laboratory findings. MRI abnormalities normalized within the following six months. At follow-up three years later, MRI signs had further regressed and demonstrated an empty sella (Fig. 2 A and B).

This case demonstrates the evolution of an empty sella from hypophysitis in an elderly patient with non-specific complaints. Hypophysitis is often associated with pregnancy [1]. However, early reports have already cautioned that this preponderance of disease manifestation is far from being a universal characteristic [2]. Yet, this condition remains most likely underrecognised in the elderly. This may also be due to an oligosymptomatic presentation in this age group as seen in our patient who only complained about progressive fatigue. The natural course of hypophysitis

remains poorly described. The evolution of an empty sella at some time during the follow-up after this inflammatory condition has been described [1]. Yet, to our knowledge, this is the first report documenting acute hypophysitis, an eventful recovery within several months under hormone substitution, and a subsequent evolution into an empty sella in a 75-year-old woman. Hypophysitis should be considered in elderly patients presenting with altered mental status, especially in the context of mild electrolyte and thyroid hormone abnormalities which are not infrequent in patients

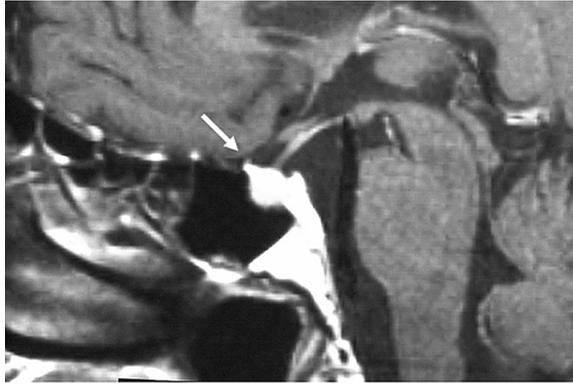


Fig. 1A

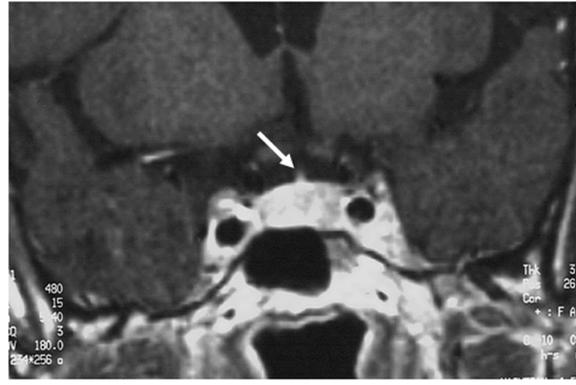


Fig. 1B

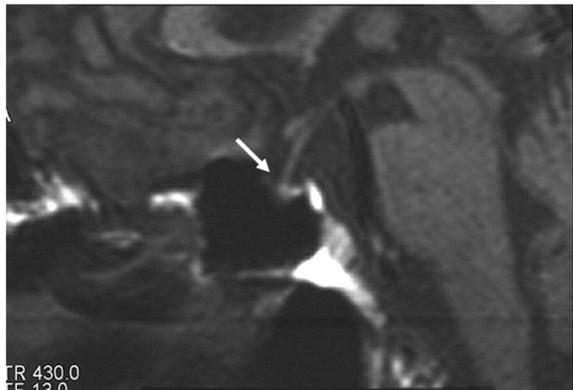


Fig. 2A

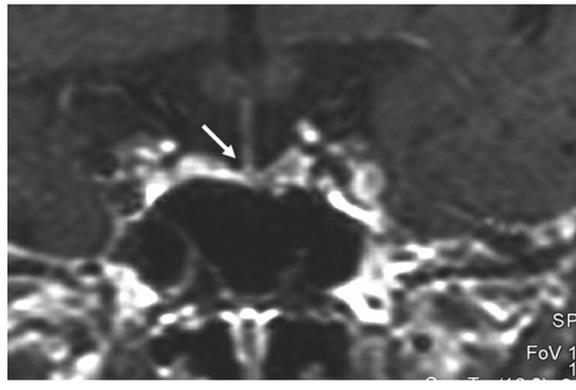


Fig. 2B

Figures: Sagittal and coronal MRI sections of the pituitary gland at the first presentation with acute hypophysitis (Fig. 1 A and B, white arrow indicates dural tail sign) and at a follow-up visit three years later (Fig. 2 A and B).

of advanced age on multiple drug regimens. Simple and effective diagnostic and therapeutic measures exist to identify these conditions and to prevent unfavourable outcomes.

The authors declare no competing interests.

REFERENCES:

- 1 Caturegli PC, Newschaffer A, Olivi MG, Pomper PC, Burger and Rose NR. Autoimmune hypophysitis. *Endocr Rev* 2005; **26**(5):599-614.
- 2 Jenkins PJ, Chew SL, Lowe DG, Afshar F, Charlesworth M, Besser GM and Wass JA. Lymphocytic hypophysitis: unusual features of a rare disorder. *Clin Endocrinol (Oxf)* 1995; **42**(5):529-34.