Images in Medicine

PNEUMOCEPHALUS DURING CABERGOLINE TREATMENT OF AN INVASIVE MACROPROLACTINOMA

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LEGEND

A 43-year-old male trisomic patient was referred for acute left headache and progressive homolateral mydriasis and ptosis. Computed tomography and T2-magnetic resonance imaging demonstrated a 4 cm invasive pituitary adenoma (Panels A and C, respectively). Blood analyses revealed hyperprolactinemia (5460 ng/ml, normal values < 15 ng/ml) and severe gonadotrophic insufficiency. Treatment was classically initiated with a dopamine agonist (cabergoline, 0.5 mg per week) and resulted in a rapid improvement of neurological symptoms and prolactinemia (2247 ng/ml) (1). Three weeks later, the patient complained of headache, nausea and dizziness. Similar radiological investigations showed a significant shrinkage of macroprolactinoma, as well as pneumocephalus (Panels B and D, arrowheads). Cabergoline treatment was continued and transnasal surgery performed to seal sinus breach of the *sella turcica*. Pneumocephalus represents a severe complication of dopamine agonist treatment of invasive prolactinoma (2). Drug-induced tumour shrinkage unmasks the erosion of the *sella* floor, thereby allowing CSF-leakage and/or pneumocephalus (3).

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