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).