

# Histiocytosis of pituitary gland - a case report



Katarzyna Jankowska<sup>1</sup>, Agnieszka Baranowska-Bik<sup>1</sup>, Jan Bardadin<sup>2</sup>,  
Wojciech Zgliczyński<sup>1</sup>

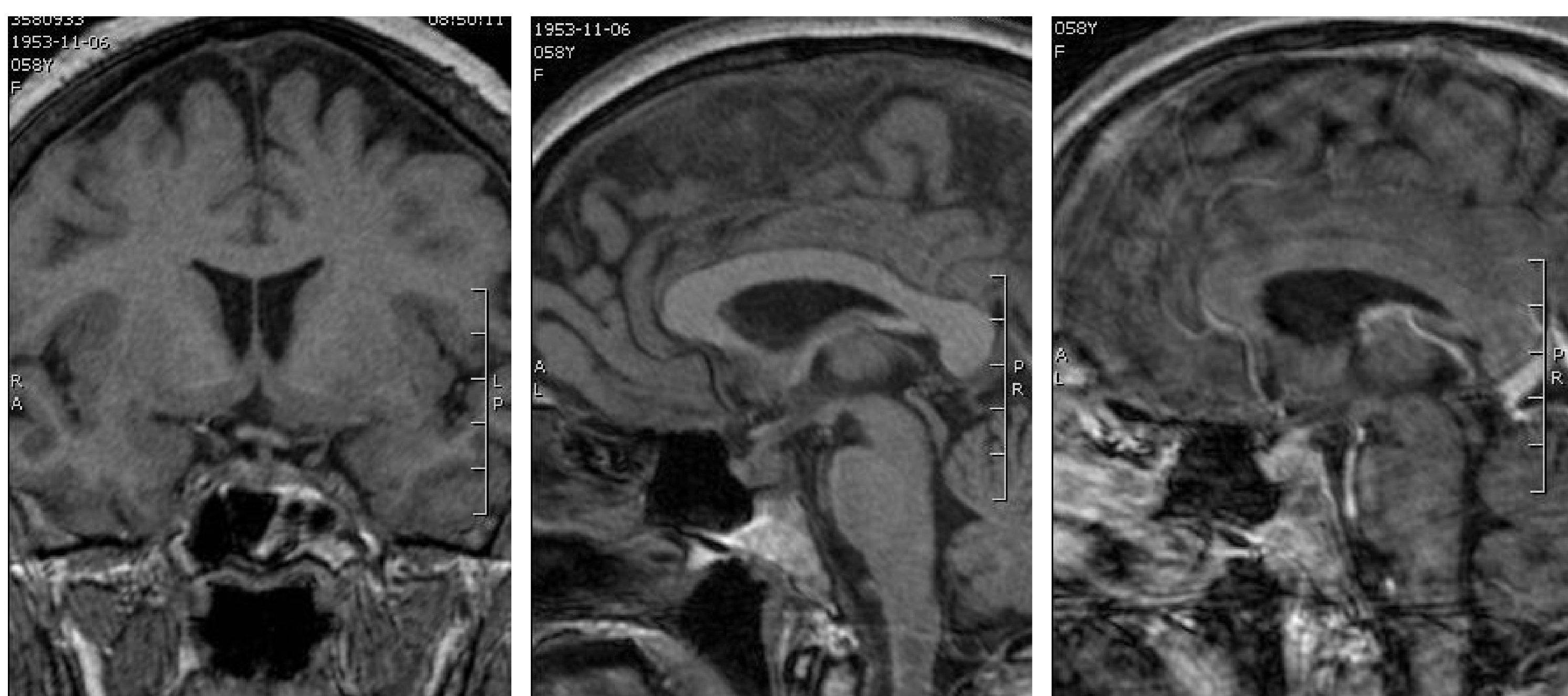
*Department of Endocrinology<sup>1</sup>, Bielański Hospital, Warsaw*

*Department of Laryngology<sup>2</sup>, Bielański Hospital, Warsaw*

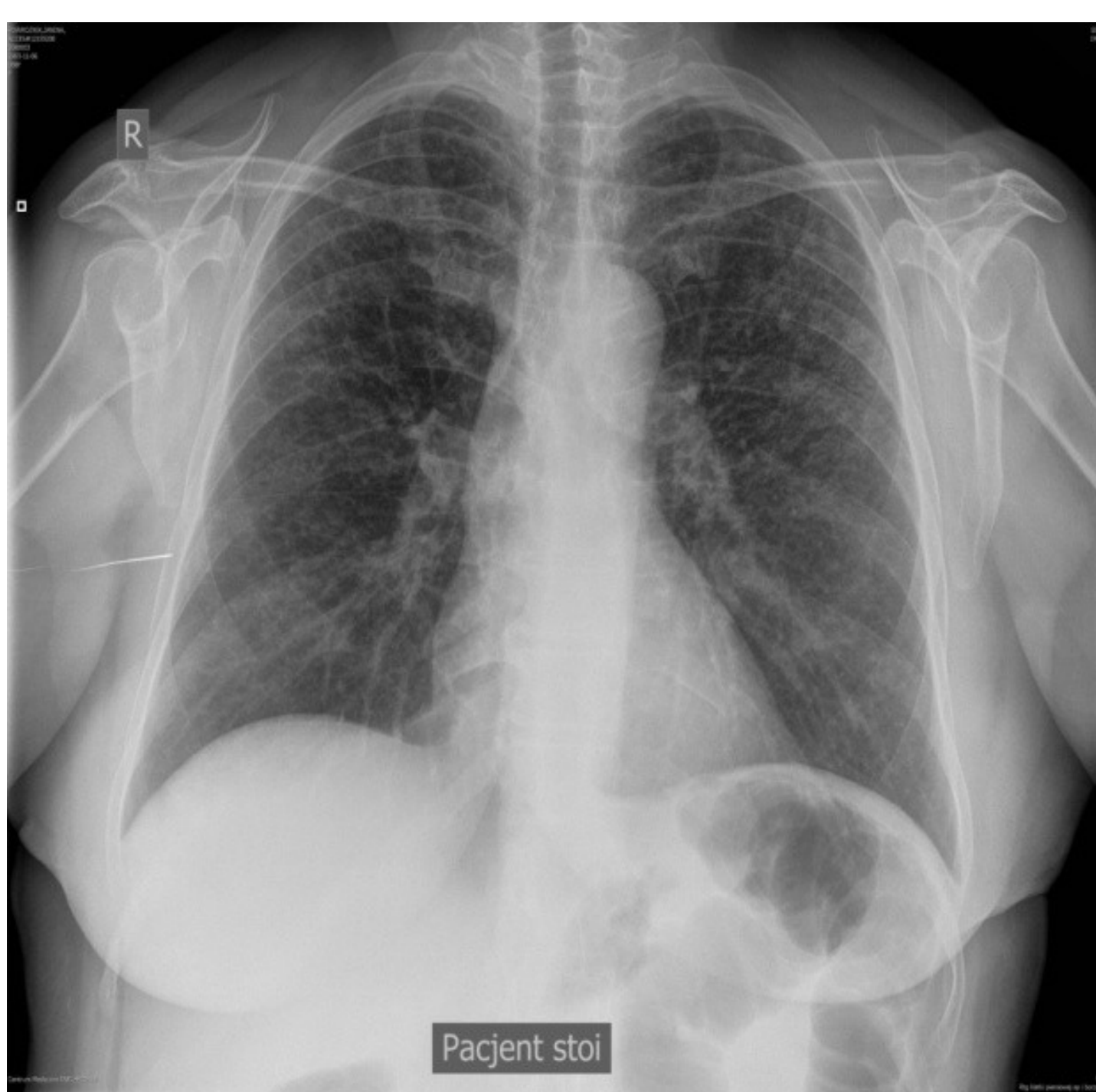
**Introduction:** Histiocytosis is a disease caused by growth of histiocytes within one or more organs. Symptomatology may be very different: from isolated skin or bone lesions, by diabetes insipidus after life-threatening multisystem form. Diabetes insipidus as a symptom of pituitary can be observed many years before visibility of the changes in magnetic resonance imaging.

**Case report:** A case of 59-year-old woman who has experienced diabetes insipidus with no other symptoms of hypopituitarism is presented in this study. It was the only symptom of the disease. She felt very well and she didn't receive any medical treatment. Increased level of OB, LDH, and decreased urine specific gravity were found in the laboratory tests. MRI of the pituitary revealed infiltration of the hypothalamic - pituitary area. Extensive diagnostics was conducted to be sure that inflammatory didn't cause the infiltration. During this process, the presence of numerous, multiorgan changes (numerous small focal lesions in the lung, gallbladder, ovaries) was revealed. Because of polyuria she received desmopressin.

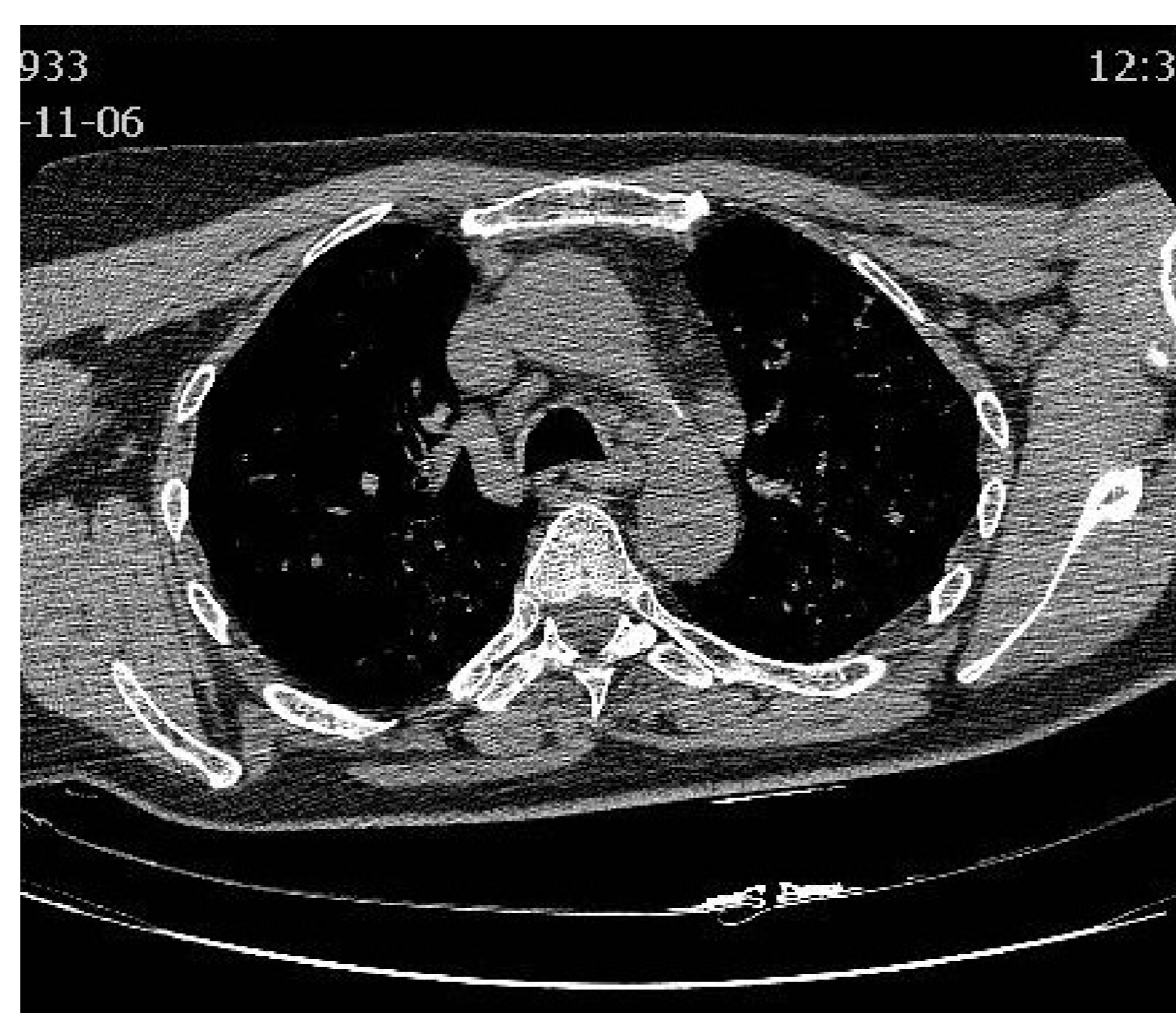
**MR:** change 10x8x5 mm at the back of the sella - no signal of posterior pituitary



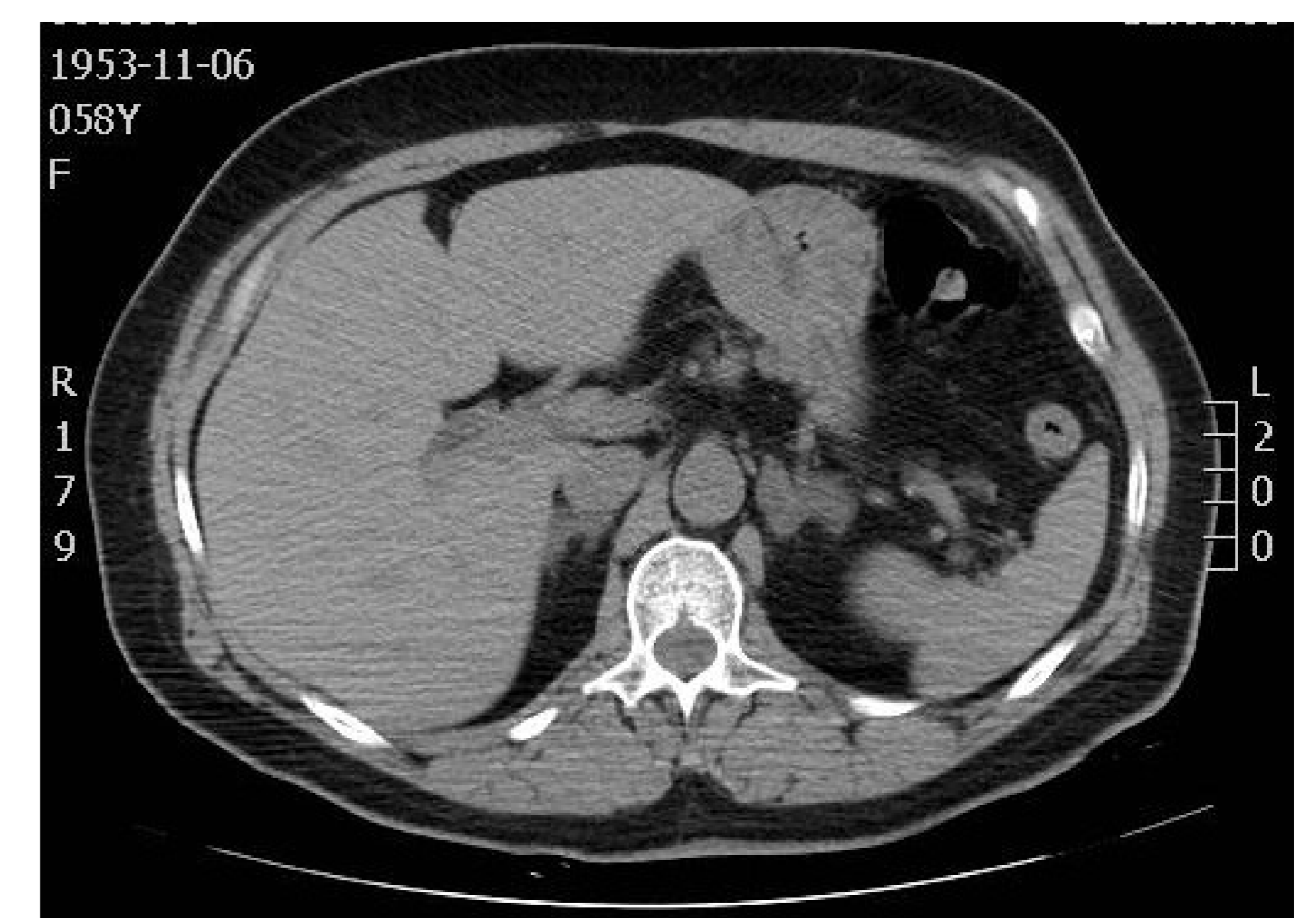
**Ultrasound of the thyroid:** thyroid moderately increased (28 mL), nodular with low and heterogeneous echogenicity. The largest nodule 20 mm hypoechoogenic with microcalcifications and the central flow.



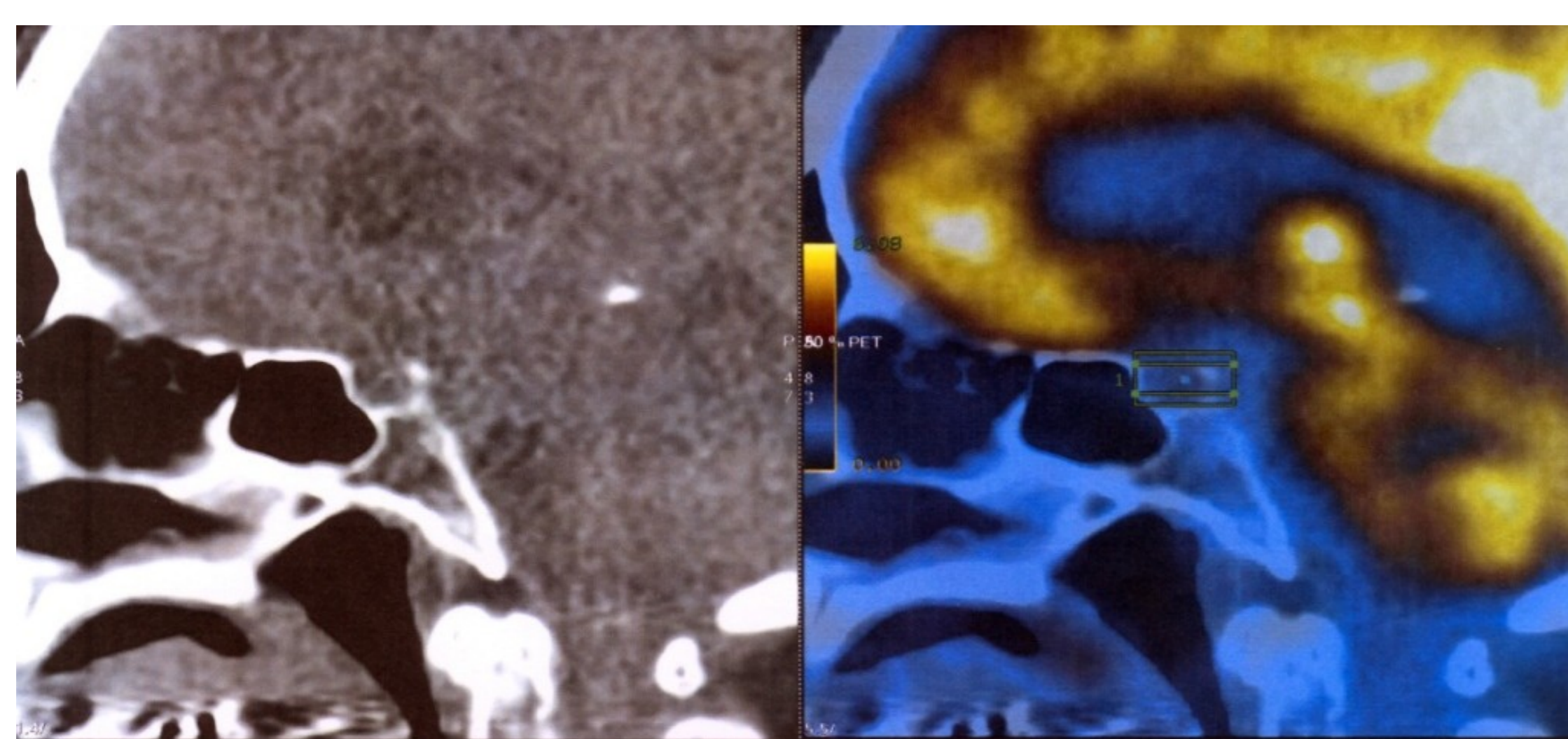
**Chest X - ray:** diffuse nodular changes



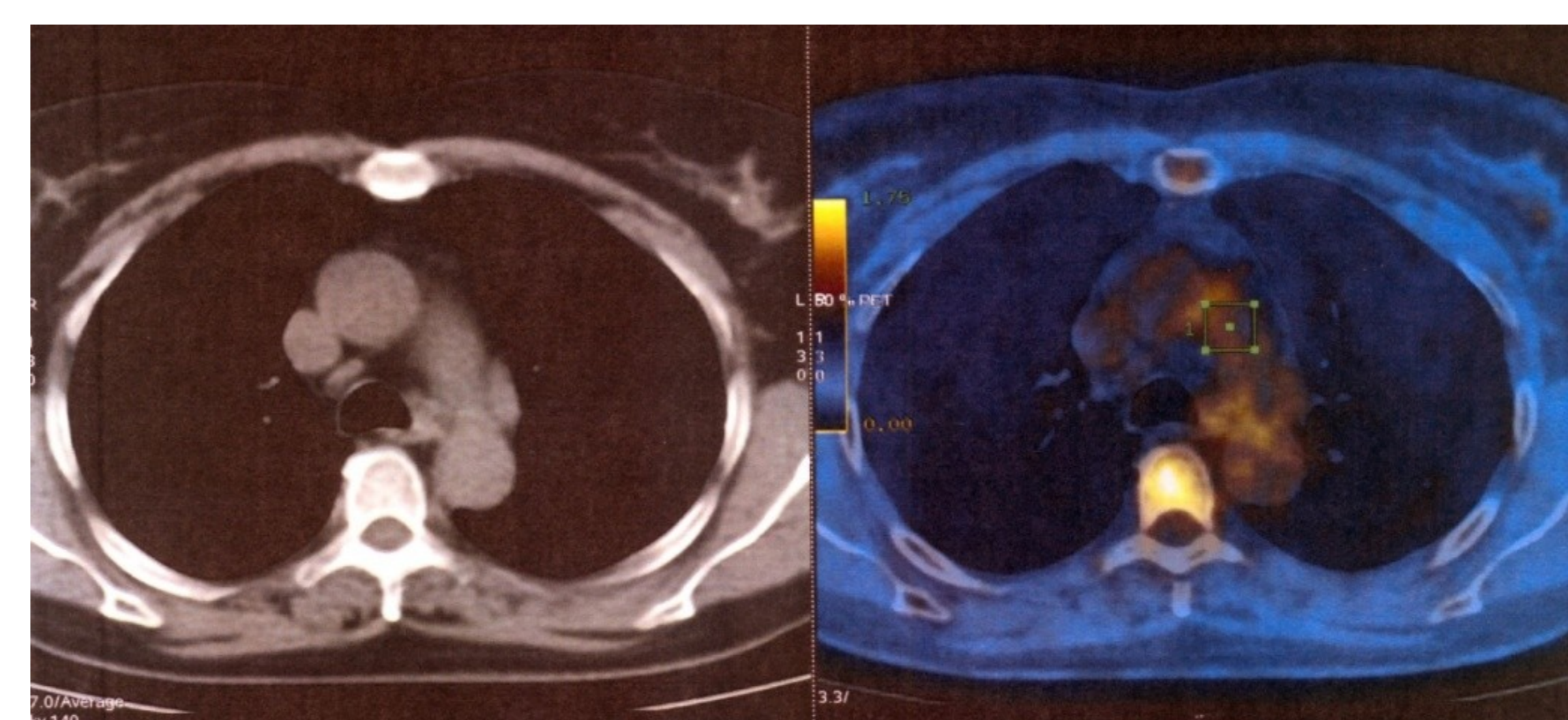
**CT:** diffuse nodular changes



**Abdominal CT:** tumor of gallbladder (14 mm); polycyclic tumor of the left adrenal gland 28x18 mm (radiodensity 24 jH).



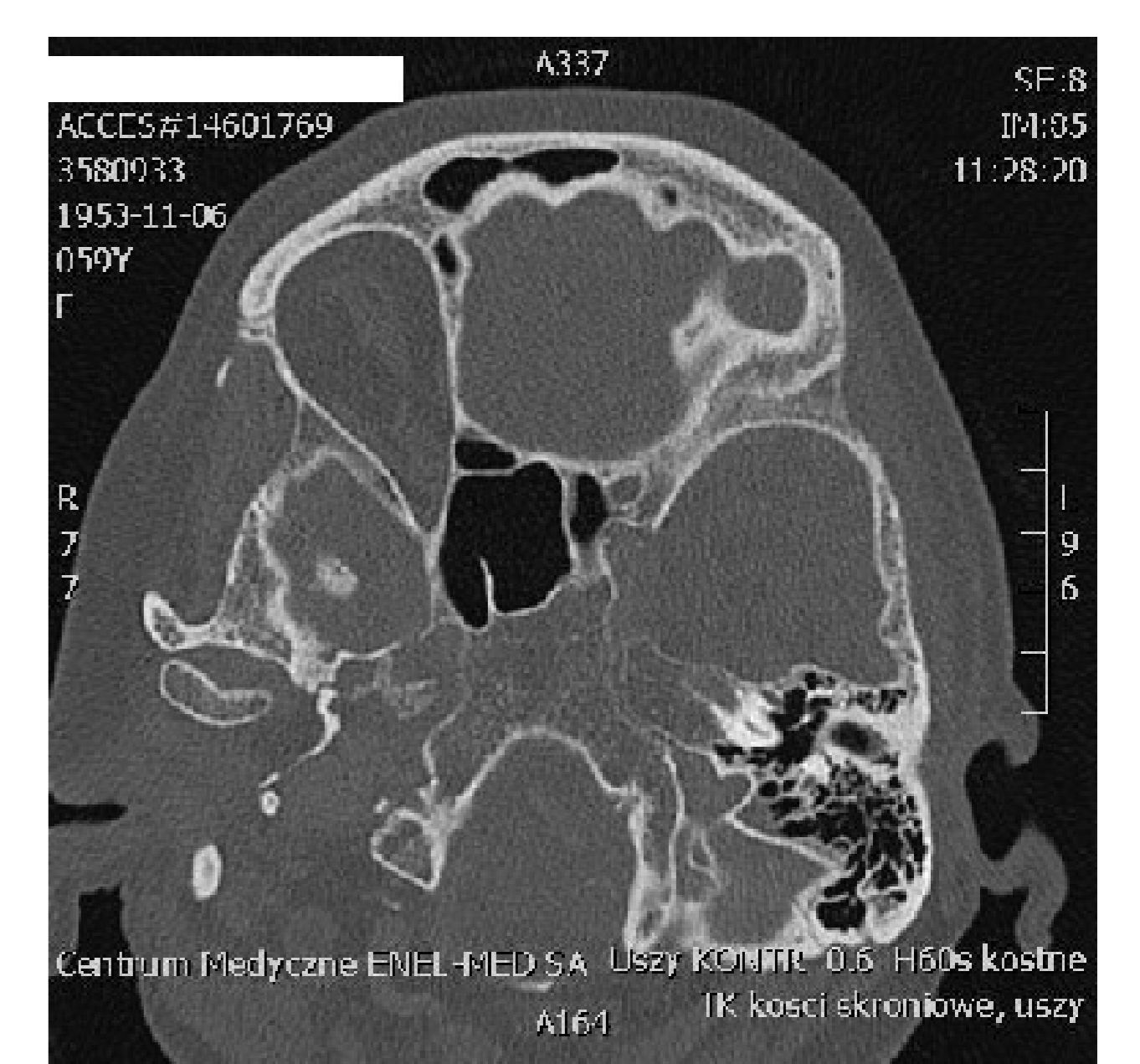
**PET:** without evidence of metabolically active malignant process



The most nagging discomfort the patient felt in the right ear. The ENT consultation revealed a change resulting in narrowing of the external auditory canal. The change within the right temporal bone was described during the CT of the head. Material collected for histopathological examination during surgery allowed for the diagnosis: eosinophilic granuloma. The inflammatory infiltration was composed of lymphocytes and many histiocytes.

Due to the high risk of complications, pituitary gland biopsy is not performed. After inflammatory infiltration of the pituitary was excluded, histiocytosis of the pituitary was recognized. The diagnose of the systemic histiocytosis was performed and the patient was sent to chemotherapy.

**Conclusion:** Diabetes insipidus should not be underestimated as a symptom of the disease. Diabetes insipidus may be the first manifestation of systemic disease with involvement of the pituitary gland.



Histiocytosis