

Utility of IHC for Hormone Secretion in Pituitary Adenomas for the Prediction of Outcomes

Raydeh Al Khani, MD, Professor of Pathology, Faculty of Medicine, Damascus University, Damascus, Syria.

Abstract

Various types of hormones, prehormonal substances and transcription factors are detected in pituitary adenomas.

Immunohistochemical study have an increasing importance in pituitary adenomas for the accurate diagnosis and the prediction of clinical outcomes of these adenomas.

Monohormonal secretion in pituitary adenomas is frequent; notably prolactin secretion.

Bihormonal secretion is well known, classically GH-PRL and FSH-LH. Other combinations of bihormonal secretion are reported; they are sometimes underestimated.

Plurihormonal secretion in pituitary adenomas is usually under estimated; it is in most cases subclinical.

Demonstration of hormones, transcription factors for functional differentiation and proliferation index have an important role in the classification, prediction and treatment of these adenomas, as the demonstration of neuroendocrine differentiation.

IHC is frequently not performed and the accurate classification and prognosis of these adenomas remains obscure.