It is related to high levels of growth hormone (GH) and insulin-like growth factor-I (IGF-1).

MRI

The enhancement was significantly lower in GH secreting pituitary neuroendocrine tumor than in non-secreting ones. [1].

T2 weighted image differentiates GH secreting pituitary neuroendocrine tumors into subgroups with particular behaviors. This raises the question of whether T2-weighted signal could represent a factor in the classification of acromegaly in future studies [2].

In patients with acromegaly, T2 weighted image signal intensity at diagnosis correlates with histological features and predicts biochemical outcome of first-line somatostatin analogues (SA) treatment [3].

Biomarkers

Each of the biomarkers, Ki-67 and p53, along with patient's age and mixed GH-prolactin secretion showed a kind of correlation with each of aspects of the clinical, hormonal and radiologic outcome of GH-secreting pituitary neuroendocrine tumors [4].

Best Practices

D1-rGH could be a highly specific test for the early diagnosis of long-term acromegaly persistence, which is predicted by a value > 2.5 ng/mL with a great degree of certainty. The diagnostic performance of D2-rGH was insufficient. Further research is required to validate these preliminary results prior to modifying the postoperative management of acromegaly [5].

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