# Clinically Non-Functioning Pituitary Neuroendocrine Tumor classification

Symptomatic Non-Functioning Pituitary Neuroendocrine Tumor.

Asymptomatic Non-Functioning Pituitary Neuroendocrine Tumor.

see also Clinically non-functioning pituitary microadenoma.

see also Clinically non-functioning pituitary macroadenoma.

see Giant clinically Non-Functioning Pituitary Neuroendocrine Tumor

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Nonfunctioning pituitary neuroendocrine tumors are mainly gonadotroph, but may also be “silent”.

Silent, or clinically nonfunctioning, pituitary neuroendocrine tumors can arise from any anterior pituitary cell type.

Some are **“clinically silent”** in that they result in a supranormal serum concentration of the hormonal product of the cell type from which the adenoma arose but do not cause the clinical manifestations typical of excessive levels of that hormone.

Others are **“totally silent”** in that they result in neither hormonal excess nor clinical manifestations. Gonadotroph and null cell adenomas are the most prevalent types and are typically silent.

25 to 30 percent of pituitary neuroendocrine tumors are clinically nonfunctioning or “silent”; 80 to 90 percent of these are gonadotroph adenomas, making them the most common type of pituitary macroadenoma.

By immunocytochemistry, the large majority of these tumors are glycoprotein producing and less commonly they are non-functioning somatotroph, lactotroph or corticotoph adenomas. In contrast to the immunocytochemistry results, only a minority of these tumors actively secrete intact gonadotrophs or glycoprotein subunits [1)].

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Null cell adenoma

Oncocytoma

Gonadotropin secreting adenoma

Silent corticotropin secreting adenoma

Glycoprotein secreting adenoma.

1)
Jaffe CA. Clinically Non-Functioning Pituitary Neuroendocrine Tumor. Pituitary.2006;9(4):317-21. Review. PubMed PMID: 17082898.