

# Addison's disease

Primary adrenal insufficiency, also called Addison's disease, occurs when adrenal gland production of [cortisol](#) is chronically deficient, resulting in chronically elevated [ACTH](#) levels; when a [pituitary tumor](#) is the cause of elevated ACTH (from the anterior pituitary) this is known as [Cushing's Disease](#) and the constellation of signs and symptoms of the excess cortisol (hypercortisolism) is known as [Cushing's syndrome](#). A deficiency of ACTH is a cause of secondary adrenal insufficiency. ACTH is also related to the circadian rhythm in many organisms.

Functional adrenocorticotrophic hormone-secreting pituitary neuroendocrine tumors (ACTH-PAs) secrete inappropriate amounts of ACTH, which results in disorderly and excessive production of cortisol by the adrenal gland <sup>1)</sup>.

[Nonfunctioning pituitary macroadenoma](#) (NFMA) patients suffer from altered sleep-wake rhythmicity. [Hydrocortisone](#) dependency may explain part of the decreased daytime functioning, but the independent influence of [visual field defects](#) (VFD) and differences between [Addison's disease](#) (AD) and NFMA patients point towards a role for dysfunction of the adjacent [suprachiasmatic nucleus](#) (SCN) <sup>2)</sup>.

## Treatment

[Glucocorticoid](#) and [mineralocorticoid](#) must be replaced.

<sup>1)</sup>

Aron DC, Findling JW, Tyrrell JB: Cushing's disease. Endocrinol Metab Clin North Am 16:705-730, 1987

<sup>2)</sup>

Joustra SD, Kruijssen E, Versteegen MJ, Pereira AM, Biermasz NR. Determinants of altered sleep-wake rhythmicity in patients treated for nonfunctioning pituitary macroadenomas. J Clin Endocrinol Metab. 2014 Dec;99(12):4497-505. doi: 10.1210/jc.2014-2602. PubMed PMID: 25210880.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

[https://neurosurgerywiki.com/wiki/doku.php?id=addison\\_s\\_disease](https://neurosurgerywiki.com/wiki/doku.php?id=addison_s_disease)

Last update: **2024/06/07 02:50**

