

Adrenal Mastery Course



Medications That Can Alter Cortisol and DHEA Values

Medications That Lower Cortisol

Steroids:

- **Chronic Use of Steroid Medication** (*i.e. Prednisone, Dexamethasone, Triamcinolone, Fluocinalone*). Initial rise of cortisol on test samples with any kind of steroid medication. Long term use is suppressive to normal cortisol production.

Steroidogenesis Inhibitors:

- **Ketoconazole** (*Nizoral*) – inhibits cortisol production in adrenal cortex.
- **Mitotane** (*Lysodren*) – used to treat Cushing’s disease. Inhibits production of cortisol by reducing the activity of the cells of the adrenal cortex.
- **Cytadren** (*Aminoglutethimide*) – inhibits enzymatic conversion of cholesterol to pregnenolone resulting in a decrease in the production of adrenal glucocorticoids, mineralocorticoids, estrogen and androgens. Also inhibits synthesis of thyroxine resulting in elevated TSH. Does not have an effect on prolactin. Used in the treatment of Cushing’s.

Neuromodulatory Agents:

- **Octreotide** (*Sandostatin*) – somatostatin analogue which inhibits the release of peptide hormones in various tissues; suppresses pathological release of ACTH and cortisol in Cushing’s Syndrome. Primarily used in the treatment of Cushing’s.
- **Bromocriptine** (*Parlodel, Cycloset*) – inhibits the release of CRH from the hypothalamus; is a dopamine receptor agonist (promoter) and is used to treat Parkinson’s Disease. Also used to treat infertility and amenorrhea in relation to elevated prolactin levels. Treatment for pituitary prolactinomas and overproduction of GH resulting in acromegaly. Can also be used in the treatment of Type II Diabetes.

- **Cyproheptadine** (*Periactin, Peritol*) – antihistamine, serotonin antagonist, anticholinergic; affects cortisol output by modulating output of ACTH. Indicates that serotonin has an influence over adrenal function.

Cortisol Receptor Antagonists:

- **Mifepristone** (*Korlym*) – competitively binds glucocorticoid receptors thereby inhibiting the effects of cortisol. Does not affect production of other hormones. Used to treat ectopic ACTH-producing tumors.

Antidepressant and Anti-Anxiety Medications:

- Tricyclics, SSRIs and Benzodiazepines. Effect seems to be primarily on hypothalamic release of CRF.

Medications That Raise Cortisol

- **Compounded Progesterone** – progesterone is a precursor to cortisol so it can convert to cortisol in some women.
- **Hydrocortisone** – from a compounded pharmacy; generally used with very low total cortisol on an adrenal test and correlating clinical picture. Used in divided dosages throughout the day starting with a higher dosage in the morning followed by lower dosages for the rest of the day. Used for a short period of time and gradually weaned off.
- **Cortef** - a pharmaceutical brand of hydrocortisone; has glucocorticoid activity.
- **Florinef** – synthetic adrenocortical steroid used in the treatment of Addison’s Disease. Has both mineralocorticoid and glucocorticoid activity.
- **Prednisone, Medrol Dose Pack or other Steroid Medications primarily used to treat inflammatory disorders** – these medications can come in the form of oral, topical, inhalant or nasal sprays. Ask patients about their usage prior to testing.
- **Allergy Medication, Asthma Medication, Decongestants** – any medication classified as sympathomimetic (stimulates the sympathetic nervous system) has the potential to raise cortisol levels.

- **Stimulants used in the treatment of ADD such as Dexedrine, Adderall, Ritalin** – stimulate the central nervous system. Studies have shown a rise in cortisol in children on these medications.
- **Caffeine** – central nervous system stimulant.

Medications That Lower DHEA

- **Thorazine** (*chlorpromazine*), **Seroquel** (*quetiapine*) and other antipsychotic medications.
- **Pulmicort** (*Budesonide*)
- **Estrogens**
- Oral contraceptives
- **Dexamethasone** (*Decadron*), and other corticosteroids
- **Metformin** (*Glucophage*)

Medications That Raise DHEA

- **Xanax** (*Alprazolam*) – benzodiazepine for anxiety
- **Norvasc** (*Amlodipine*) - antihypertensive
- **Arimidex** (*Anastrozole*) – lowers estrogen in postmenopausal women; breast cancer.
- **Procardia** (*Nifedipine*) – treatment of angina
- **Danazol** (*Danocrine*) – suppresses gonadotropins; endometriosis and cystic breast treatment.
- **Cardizem** (*Diltiazem*) – antihypertensive; calcium channel blocker
- **Ritalin** (*Methylphenidate*) – attention deficit hyperactivity disorder