

UZBEKISTAN
ITENKO-CUSHING

Samarkand State Medical University
"The Direction of Rheumatology"
1st Clinical Internship-Students Stage
Murodullayev Khumoyun Izzatillo o'g'li,
Khakimov Abdulaziz Anvarjon o'g'li
Ortikboev Ismoil Ikrom o'g'li
Scientific supervisor: Khasanov Farrukhjon Sherali o'g'li

Abstract: Cushing's disease is considered a rare disease characterized by hypersecretion of adrenocorticotrophic hormone (ACTH) due to pituitary adenoma, which ultimately leads to endogenous hypercorticism by stimulating the adrenal glands. Clinical signs indicating Cushing's disease, such as obesity, moon face, hirsutism and an abundance of faces, are already present in the presentation. Endogenous hypercorticism is associated with cardiovascular and metabolic manifestations, as well as with an increased risk of respiratory diseases, mental complications, osteoporosis and infections, which leads to high levels of morbidity and mortality. It is very important to diagnose Cushing's disease as early as possible and implement a treatment plan that can lead to a successful prognosis and a small number of complications.

The purpose of this article was to review the clinical, diagnostic and therapeutic aspects of Cushing's disease using the latest available guidelines.

Keywords: pituitary adenoma, adrenocorticotrophic hormone, corticotrophinolysis hormone, ACTH hypersecretion, Cushing's disease.

The contents of the article: Cushing's disease is caused by endogenous hypercorticism. This is due to hypersecretion of adrenocorticotrophic hormone (ACTH) by pituitary adenoma secreting ACTH. Although it is recognized as the cause of Cushing's syndrome, it is considered a rare disease. The secretion of ACTH by pituitary

adenoma causes bilateral adrenocortical hyperplasia along with non - suppressed hypersecretion of cortisol .In most cases, an anatomopathological examination reveals a basophilic or chromophobic pituitary adenoma (especially large ones).The prevalence of Cushing's disease is 40:1,000,000 people and is most common in women (the sex ratio is 9:1 in favor of women).Adenoma of ACTH secretion accounts for about 10-12%,5,3% of all functional and non-functional pituitary adenomas. Cushing's disease is associated with cardiovascular and metabolic manifestations, as well as an increased risk of respiratory diseases, mental complications, osteoporosis and infections, which can lead to high levels of morbidity and mortality. Since they are a consequence of endogenous hypercorticism and are associated with high morbidity even after favorable treatment, it is extremely important to diagnose Cushing's disease as early as possible and implement a treatment plan that can lead to a successful prognosis and poor results. the number of complications.

Clinical picture: In the presentation, more than 50% of patients with Cushing's disease have pituitary microadenomas with a diameter of less than 5 mm, which are difficult to see during visual examination (computed tomography and magnetic resonance imaging). Of these, only 10% are large enough to massively affect brain tissue or to affect the structure of the Sellar region (inflatable or inflatable, or the contour of cella turcica).

Clinical signs and symptoms of pituitary adenoma dissociating to ACTH are caused by compression of the tumor (rarely due to the small size of the tumor) and high levels of cortisol and androgens (Cushing's disease). The latter include:

- * With total weight gain in 50% of cases or sometimes with a center-oriented distribution of fat, especially in the trunk, abdomen, supraclavicular fat layer ("buffalo buttocks"), round multi-armed face ("moon face")
 - * * hypertension
 - * * sensitive skin, light bruises, fragility of capillaries, purple-red stripes (hips, sides, lower abdomen, root of upper extremities, chest), pimples, redness, fungal infections of the skin, poor healing of skin wounds.

- * * swelling of the lower extremities
- * * hypotrophy and fatigue of the muscles of the proximal extremities .
- * * impaired glucose tolerance or type 2 diabetes .
- * * osteopenia or osteoporosis with pathological compression fracture of the spine, aseptic necrosis of the femoral head
- * * hyperpigmentation of the skin and mucous membranes, which is a consequence of ACTH-MS cross-reactivity, is a consequence of increased ACTH levels (in Cushing's disease and non-Cushing's syndrome) or ectopic secretion of ACTH (also Nelson's syndrome).
- * * manic-depressive psychosis, depression, emotional weakness, dementia.
- * * secondary amenorrhea, hirsutism, decreased sexual dynamics
- * * leukocytosis, lymphopenia, eosinopenia, decreased immunity and frequent infections

These clinical manifestations may vary from patient to patient. Some of them are characteristic of other diseases, such as obesity, Cushing's syndrome, pseudo-Cushing's syndrome or other ectopic ACTH secretions.

Cushing's disease is associated with increased morbidity and mortality due to the high content of systemic glucocorticoids.

Radiation: Radiation therapy after surgery is recommended for patients with tumor residue, especially if it tends to increase or in cases where abnormal hormonal hypersecretion persists.

Radiotherapy methods include fractional radiation therapy, stereotactic radiosurgery (GammaKnife), CyberKnife and proton radiation therapy.

1. Fractionated external radiation therapy: The effect of fractional radiation therapy can be seen after two years, and improvements are visible only in 50-70% of patients within 3-5 years. Hypopituitarism can be observed in 40% of patients, and a secondary brain tumor is observed in 1-2% of patients.

2. Gram - The effect of gamma radiosurgery can be observed for 6 months after irradiation. Remission is noted in 70-95% of patients with Cushing 's disease .Hypopituitarism occurs in 30% of patients .

Conclusion: Cushing's disease is caused by ACTH-dissociating pituitary adenoma, which stimulates the adrenal glands and causes endogenous hypercorticism. This endogenous effect is accompanied by cardiovascular complications, metabolic, mental illnesses, diabetes mellitus and low bone density, all of which leads to an increase in morbidity and mortality.

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