Cushing’s syndrome

Prelims: *Current events of national and international importance | Health*

Why in News?

Recent studies have reported expanding treatment options for Cushing’s syndrome, particularly for patients who are not candidates for surgery or whose disease persists after surgery.

- **Cushing’s syndrome –** It happens when there is ***too much cortisol in the body over a long period.***
- Cortisol is produced by the adrenal glands and helps control blood pressure, metabolism, immunity, and the body’s response to stress. When cortisol remains high, it affects many organs.
- **Types – Exogenous Cushing syndrome -** The most common cause is long-term use of steroid medicines prescribed for asthma, autoimmune diseases, arthritis, or after organ transplants.
- **Endogenous Cushing’s syndrome** - In endogenous Cushing’s syndrome on the other hand, the body produces excess cortisol on its own.
- This is usually due to a non-cancerous tumour in the pituitary gland (called Cushing’s disease).

  The pituitary gland is a small gland located at the base of the brain.

- Less commonly, it may be caused by tumours in the adrenal glands or by tumours elsewhere in the body that produce ACTH (adrenocorticotropic hormone).

  Adrenocorticotropic hormone, a hormone normally released by the pituitary gland.

- **Signs & Symptoms -** Rare condition affecting 1–3 people per million annually; often misdiagnosed due to similarity with Obesity or Type 2

Diabetes.

- **Early signs -** Weight gain around abdomen and face; rounded “moon face” and fat buildup between shoulders.
- **Skin changes -** Thin skin, easy bruising, slow wound healing, purple stretch marks; acne and excess facial/body hair (in women).
- **Hormonal effects-** Irregular/absent periods in women; reduced libido or fertility in men.
- **Muscle & energy -** Muscle weakness (arms and thighs) and persistent fatigue.
- **Metabolic effects -** High blood pressure, high blood sugar/diabetes, increased cholesterol.
- **Bone & mental health -** Osteoporosis risk, mood swings, anxiety, depression, sleep problems, memory and concentration issues.
- **Immune impact-** Increased susceptibility to infections.
- **Children -**Weight gain with slowed height growth.
- **Complications if untreated-** Higher risk of heart disease, blood clots, infections.
- **Vulnerable age groups -** People who take steroid medicines for a long time are at highest risk. Even moderate doses over time can increase cortisol levels.
- Women are more commonly affected than men in naturally occurring (endogenous) cases, especially ***between ages 30 and 50.***
- Although rare, Cushing’s syndrome can be life-threatening if left untreated.
- **Treatment - Medication-Induced** - If caused by steroid use, doses are tapered gradually under medical supervision.
- **Surgical Intervention -** Usually the first-line treatment for tumors.
- **Pituitary Tumors -** Removed via specialized neurosurgery.
- **Adrenal Tumors-** May require removal of the affected gland (adrenalectomy).
- **Alternative Therapies-** If surgery is not an option or is incomplete, radiation therapy or cortisol-blocking medications are used.
- **Recovery & Monitoring - Temporary Replacement:** Patients may need cortisol supplements until natural production stabilizes.
- **Long-term Care:** Regular follow-ups are essential as the condition can recur.

Reference

The Hindu | Cushing’s syndrome



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