Phantom Pain

Prelims: *Current events of national and international importance*

Why in News?

Phantom pain is one of the most puzzling pain conditions in medicine; even after a limb or body part has been removed, the brain can continue to perceive sensations, sometimes mild, sometimes debilitating.

- **Phantom Pain** – It is a *neurological condition* where people feel sensations, often painful—in a body part that has been amputated or removed.
- **History** – The term "phantom" originates from words meaning illusion or ghost, describing the strange experience of sensing a missing body part.
- It was first described in the 16th century by French military surgeon Ambroise Paré.
- The term "phantom limb" coined in 1871 by American neurologist Silas Weir Mitchell.
- **Beyond limbs** – It is most associated with arm or leg amputations, it is not limited to limb loss; it can also occurs after breast removal, eye removal, tooth extraction, or rectal surgery.
- **Phantom Sensation vs Phantom Pain**
- **Phantom sensation** – The feeling that a removed body part is still present, generally harmless.
- **Phantom pain** – It involves actual discomfort or pain arising from that absent part.
- It can significantly affect sleep, daily activities, and quality of life.
- **Symptoms** – Phantom pain can vary widely from person to person like burning, stabbing, cramping, throbbing, electric shock-like pain, itching, tingling, or a sensation that the missing limb is still moving.
- Although some people experience phantom pain soon after surgery or months later, often peaking within 6–12 months.
- **Prevalence**
    - **Global prevalence** – 50–80% of amputees.
    - **India prevalence** – 40–70%, especially among diabetes-related amputations, vascular disease, road traffic injuries, and trauma.
- **Risk factors**
    - Severe pain before amputation
    - Poorly controlled post-operative pain
    - Traumatic amputations or nerve injuries
    - Anxiety, depression, post-traumatic stress disorder, poor sleep
- **Reason for feeling Pain** – The brain retains a "map" of the missing limb, continuing to generate sensations, the remaining nerves send abnormal signals interpreted as

pain.
- This mismatch between brain memory and nerve activity drives phantom pain.
- **Treatment** – There is currently no single cure for this; a multidisciplinary approach can provide significant relief.
- **Medications** – Gabapentin, pregabalin, certain antidepressants.
- **Mirror therapy** – Using a mirror to create the illusion of the missing limb, helping the brain reorganize perception.
- **Other methods**
    - Early rehabilitation and prosthetic fitting
    - Physical stimulation of the residual limb
    - Psychological support and CBT
    - Acupuncture, complementary therapies
    - **Emerging techniques** – VR-based rehab, brain stimulation

Reference

The Hindu | Phantom Pain

