

Prelim Bits 11-06-2022 | UPSC Daily Current Affairs

Ramsay Hunt Syndrome

A famous Canadian pop singer is suffering from 'Ramsay Hunt Syndrome'.

- Ramsay Hunt Syndrome (herpes zoster oticus) is a rare **neurological disorder** which usually leads to paralysis of the facial nerve and a rash that generally affects the ear or mouth or face.
- **Causes** - The condition is caused when the **varicella zoster virus** infects a nerve in the head. It is the same virus that causes chickenpox in children and shingles in adults.
- Generally with chickenpox, the virus continues to live in your nerves.
- Years later, it may reactivate and affect your facial nerves, resulting in Ramsay Hunt Syndrome.
- The illness can occur in anyone who has had chickenpox, and is most common in older adults, particularly people over 60.
- **Symptoms** - Two main symptoms of Ramsay Hunt syndrome are,
 1. A painful red shingles rash with fluid-filled blisters on, in and around one ear, and
 2. Facial weakness or paralysis on the same side as the affected ear.
- Ear pain, hearing loss, tinnitus (ringing in the ears), dry mouth and eyes, difficulty closing one eye, and vertigo (sensation of things spinning) are the common symptoms.
- In more serious cases, the syndrome can also cause facial paralysis and hearing loss.
- Ramsay Hunt Syndrome is **not contagious**, but reactivation of the virus can cause a bout of chickenpox in people who haven't previously had the illness or been vaccinated for it.
- **Treatment** - The illness almost always goes away, except in rare instances.
- People suffering from Ramsay Hunt are generally prescribed anti-viral medication (such as acyclovir or valacyclovir) and in more serious cases, steroids (such as prednisone).
- **Connection** - Some studies have suggested that there may be links between the Covid-19 vaccine and the Ramsay Hunt Syndrome.

Only about 5 to 10 out of every 100,000 people will develop Ramsay Hunt Syndrome each year.

Reference

1. <https://indianexpress.com/article/explained/explained-justin-bieber-ramsay-hunt-syndrome-7964008/>
2. <https://www.mountsinai.org/health-library/diseases-conditions/ramsay-hunt-syndrome#:~:text=Ramsay%20Hunt%20syndrome%20is%20a,a%20nerve%20in%20the%20head.>
3. <https://www.mayoclinic.org/diseases-conditions/ramsay-hunt-syndrome/symptoms-causes/syc-20351783>

Amyloidosis

Former Pakistan President General is suffering from Amyloidosis.

Amyloid is an abnormal protein, which is not normally found in the body. But it can be formed from several different types of proteins.

- Amyloidosis is a rare disease that occurs when **amyloid builds up in one's organs**, affecting their shape and functioning.
- Amyloid deposits can build up throughout one's body, or in just one area like in the heart, brain, kidneys, spleen and other parts of the body.
- **Nature** - Some types of Amyloidosis can develop as secondary to a different health condition.
- Some types of Amyloidosis can also develop as a primary condition, which may lead to life-threatening organ failure.
- **Causes** - Some types are hereditary or caused due to a gene mutation.
- But, others are caused by outside factors, such as inflammatory diseases or long-term dialysis.
- **Diagnosis** - Imaging procedures that look at the body's internal organs, such as an echocardiogram, nuclear heart test or liver ultrasound, are the normal tests to diagnose the condition.
- **Treatment** - Currently, there is no cure for amyloidosis. The amyloid deposits cannot be directly removed.
- The goals of amyloidosis treatment are to **slow the progression**, reduce the impact of symptoms, and prolong life.
- Actual therapy depends on the type of amyloidosis one has, like Chemotherapy, bone marrow transplant, stem cell transplant, etc.,
- Secondary amyloidosis is treated by controlling the underlying disorder and with powerful anti-inflammatory medicines.

Types of Amyloidosis

The type of protein and where it collects tell the type of amyloidosis one has. Bottom of Form

- **Light-chain (AL) amyloidosis** is the most common type in developed countries which can affect the kidneys, spleen, heart, and other organs.
- People with conditions such as multiple myeloma or a bone marrow illness are more likely to have AL amyloidosis.
- This starts in plasma cells within the bone marrow. Plasma cells create antibodies with both heavy chain and light chain proteins.
- If the plasma cells undergo abnormal changes, they produce excess light chain proteins that can end up in the bloodstream.
- These damaged protein bits can accumulate in the body's tissues and damage vital organs such as the heart.
- **AA amyloidosis or secondary amyloidosis** is a condition that is the result of another chronic infectious or inflammatory disease, such as rheumatoid arthritis, Crohn's disease, or ulcerative colitis.
- It mostly affects one's kidneys, digestive tract, liver, and heart.
- AA refers to the amyloid type A protein that causes it.
- **Dialysis-related amyloidosis** is more common in older adults and people who have been on dialysis for more than 5 years.
- This form of amyloidosis is caused by deposits of beta-2 microglobulin that build up in the blood.
- Deposits can build up in many different tissues, but it most commonly affects bones, joints, and

tendons.

- **Transthyretin amyloidosis** can be inherited from a family member and is hence commonly referred to as familial amyloidosis.
- Transthyretin is a protein that is also known as prealbumin made in the liver.
- As such, this often affects the liver, nerves, heart, and kidneys and many genetic defects are linked to a higher chance of amyloid disease.

Reference

1. <https://indianexpress.com/article/explained/explained-what-is-amyloidosis-7963439/>
2. <https://www.nhs.uk/conditions/amyloidosis/#:~:text=Amyloidosis%20is%20the%20name%20for,and%20tissues%20to%20work%20properly.>

Sant Tukaram Shila Temple

Prime Minister will inaugurate the Sant Tukaram Shila Mandir in the temple town of Dehu in Pune district.

- The Shila Mandir is a temple dedicated to a slab of stone (shila) on which Bhakti saint Tukaram had meditated for 13 days, when the **authenticity of the Abhyangs** he had written was challenged.
- Prior to this, he had immersed his entire work in the Indrayani River; the work miraculously reappeared after 13 days, proving their authenticity.
- The very rock where Sant Tukaram Maharaj sat for 13 days is pious and a **place of pilgrimage for the Warkari sect**.
- The Shila is currently on the Dehu Sansthan temple premises, and that for centuries has been the starting point of **Wari**, the annual pilgrimage to Pandharpur.
- The Sansthan decided to replace the silver cast covering with an image of Sant Tukaram Maharaj on the Shila, with a temple housing both.

Warkari Sect

- Sant Tukaram and his work are central to the Warkari sect spread across Maharashtra.
- His message about a casteless society and his denial of rituals had led to a social movement.
- Sant Tukaram is credited with starting the Wari pilgrimage.
- During the Wari, devotees congregate in the temple towns of Dehu and Alandi to accompany the padukas of Sant Tukaram and Sant Dyaneshwar respectively as they start for Pandharpur.
- Participants finish their sowing before they set off.
- The pilgrims reach Pandharpur on the day of Ekadashi.

Reference

1. <https://indianexpress.com/article/explained/the-sant-tukaram-temple-and-its-significance-7963601/>
2. <https://theprint.in/india/pm-to-inaugurate-sant-tukaram-temple-in-dehu-on-june-14/985615/>

Vale do Javari

British journalist went missing from Vale do Javari in Brazil.

- Vale do Javari is the western section of the **Brazilian Amazon** rainforest.
- It is named after the **Javari River**, which forms the country's border with Peru.

- The region is home to the **greatest concentration of isolated tribal groups** in the Amazon and the world.
- The area is home to 14 indigenous tribes with nearly 6,000 inhabitants, who are known to reject contact with the outside world.
- The communities living in the Vale do Javari have been granted exclusive territorial rights in Brazil's 1988 constitution and then in 2001 under the demarcation of indigenous territory.
- **Threats** - Among the main threats to the well-being of these groups are illegal fishing, hunting, logging, mining, cattle ranching, missionary actions and drug trafficking.
- The area has been witnessing increasing illegal gold prospecting and poaching.

Vale do Javari forms part of an international **cocaine trafficking route**, with **gold** being exchanged for drugs and arms, consequently making it a hotspot for **violent crimes**.

Reference

1. <https://indianexpress.com/article/explained/explained-vale-do-javari-amazons-remote-uncontacted-frontier-british-journalist-missing-7961204/>
2. <https://factrepublic.com/facts/17654/>

Hypogonadism

A new study found that the testosterone treatment increases the risk of cardiovascular events such as arrhythmia, heart attack, and stroke, in the short to medium terms.

Hypogonadism occurs when your sex glands or gonads produce little or no sex hormones - both male and female. It may also be known as gonad deficiency.

- Hypogonadism in male is a condition caused by the **deficiency of testosterone**, the male sex hormone.
- It may be called low serum testosterone or andropause.
- **Types** - There are two types of hypogonadism: primary and central.
- Primary hypogonadism means that you don't have enough sex hormones in your body due to a problem in your gonads.
- Your gonads are still receiving the message to produce hormones from your brain, but they aren't able to produce them.
- In central (secondary) hypogonadism, the problem lies in your brain.
- Your hypothalamus and pituitary gland, which control your gonads, aren't working properly.
- **Symptoms** - Sexual dysfunction, weakening of bones and muscles, and reduced quality of life.
- **Risk factors** include ageing (as testosterone levels decline with age), obesity and diabetes.
- Worldwide, 2% of men aged over 40 are affected, and this is growing as the population gets older.

Testosterone Replacement Therapy

- It is the standard treatment for hypogonadism. It can help reverse the effects of hypogonadism.
- Prescribing of testosterone for hypogonadism is increasing globally, but conflicting messages about its safety may have led to many patients not receiving the treatment.

- **Impacts** - Testosterone treatment significantly reduced serum total cholesterol, HDL, and triglycerides.
- However, there were no significant differences in LDL, blood pressure, glycaemic parameters, diabetes incidence, and prostate adverse outcomes.

Reference

1. <https://indianexpress.com/article/explained/explained-testosterone-deficiency-safety-replacement-therapy-7961353/>
2. <https://www.healthline.com/health/hypogonadism>
3. <https://www.mayoclinic.org/healthy-lifestyle/sexual-health/in-depth/testosterone-therapy/art-20045728>

