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Shingles vaccine & lower dementia risk: what new study says

What is Shingles?

- Shingles is a **viral infection** that leads to **painful skin rashes**, usually forming a single stripe of blisters on one side of the torso.
- Caused by the **varicella-zoster virus**, the same virus responsible for **chickenpox**.
- After a person recovers from chickenpox (typically during childhood), the virus lies dormant in the **nerve cells** for life.
- It can **reactivate later**, especially when the **immune system is weakened**, resulting in shingles.
- While the rash is the most visible symptom, **pain can persist** long after the rash heals — known as **post-herpetic neuralgia**.
- Severe cases can lead to **vision loss** (if rashes are near the eye), **facial paralysis**, or even **inflammation of the brain** (encephalitis).

Transmission of Shingles

- People who never had chickenpox or its vaccine may contract **varicella-zoster virus** if they:
 - Come in **direct contact** with the fluid from shingles rashes.
 - **Breathe in virus particles** from an infected person.

About the Shingles Vaccine

- The **shingles vaccine** prevents the reactivation of the varicella-zoster virus.
- It is **primarily recommended** for individuals **above 50 years** of age.
- Also advised for people with **weakened immune systems**, such as those with **HIV** or undergoing **chemotherapy**.
- There are **two vaccines available in India**:
 - **Zostavax** – live attenuated vaccine (uses weakened form of the virus).
 - **Shingrix** – recombinant vaccine (uses parts of the virus that do not cause the disease).



Health Benefits Beyond Shingles Prevention

- A **South Korean study** found that those vaccinated had:
 - A **23% lower risk of developing cardiovascular conditions**.
 - **Reduced risk of dementia**, a neurodegenerative disease with limited treatments.
- These findings imply a **broader public health benefit** of shingles vaccination beyond infection control.

Findings from the Welsh Study

- The **Welsh vaccine rollout** acted as a "**natural experiment**", resembling a **randomized controlled trial (RCT)** — the gold standard in medical research.
- This allowed researchers to **observe the effects of vaccination more reliably** than just patient records.
- The study supported a **link between shingles prevention and reduced dementia risk**.
- Possible explanations include:
 - Preventing shingles might stop **virus-induced cognitive impairment**.
 - Vaccination may **positively modulate the immune system**, offering protection against dementia.

Wider Implications of Vaccine Research

- Similar protective associations have been observed for other common vaccines like those for:
 1. **Diphtheria**
 2. **Pneumococcal diseases**
 3. **Hepatitis A**
 4. **Typhoid**
- This emerging evidence suggests that **routine adult vaccinations** may play a role in **long-term cognitive and cardiovascular health**, not just in infection prevention.

Way Forward

- Vaccination policies may be expanded and **integrated with strategies for healthy aging**.
- More **rigorous studies** are needed to confirm these associations and understand the mechanisms.



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- Governments and health organizations can explore the **dual benefit of vaccines** — as tools for both **infectious disease control** and **chronic disease prevention**.

Source: <https://indianexpress.com/article/explained/explained-health/shingles-vaccine-lower-dementia-risk-what-new-study-says-10011405/>



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