Bengaluru Scientists Develop Blood Test for Early Alzheimer's Detection

Scientists at the National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru have developed a non-invasive blood test capable of detecting early biomarkers of Alzheimer's disease.

How the Test Works

- The test measures beta-amyloid and tau protein fragments in the blood.
- These proteins are strongly linked with Alzheimer's-related brain changes.
- The test has shown over 85% accuracy in preliminary studies, making it a potential alternative to expensive and invasive diagnostic methods.

- Current gold-standard methods include PET scans and lumbar punctures, which are costly and not widely available in India.
- This blood test could be a low-cost, widely accessible solution, especially in resource-limited settings.

Clinical Trials & Timeline

- Human clinical trials are underway with larger patient groups.
- If successful, experts suggest the test could be available for use within 3-4 years.

Alzheimer's in India – The Growing Challenge

- India currently has over 8 million dementia patients, with Alzheimer's being the leading cause.
- Projections indicate that cases may triple by 2050 due to an aging population.
- Early detection can help in better care planning, lifestyle modifications, and targeted therapies.

Global Relevance

This development adds India to the list of countries working on blood-based Alzheimer's diagnostics, potentially making the technology more affordable worldwide.