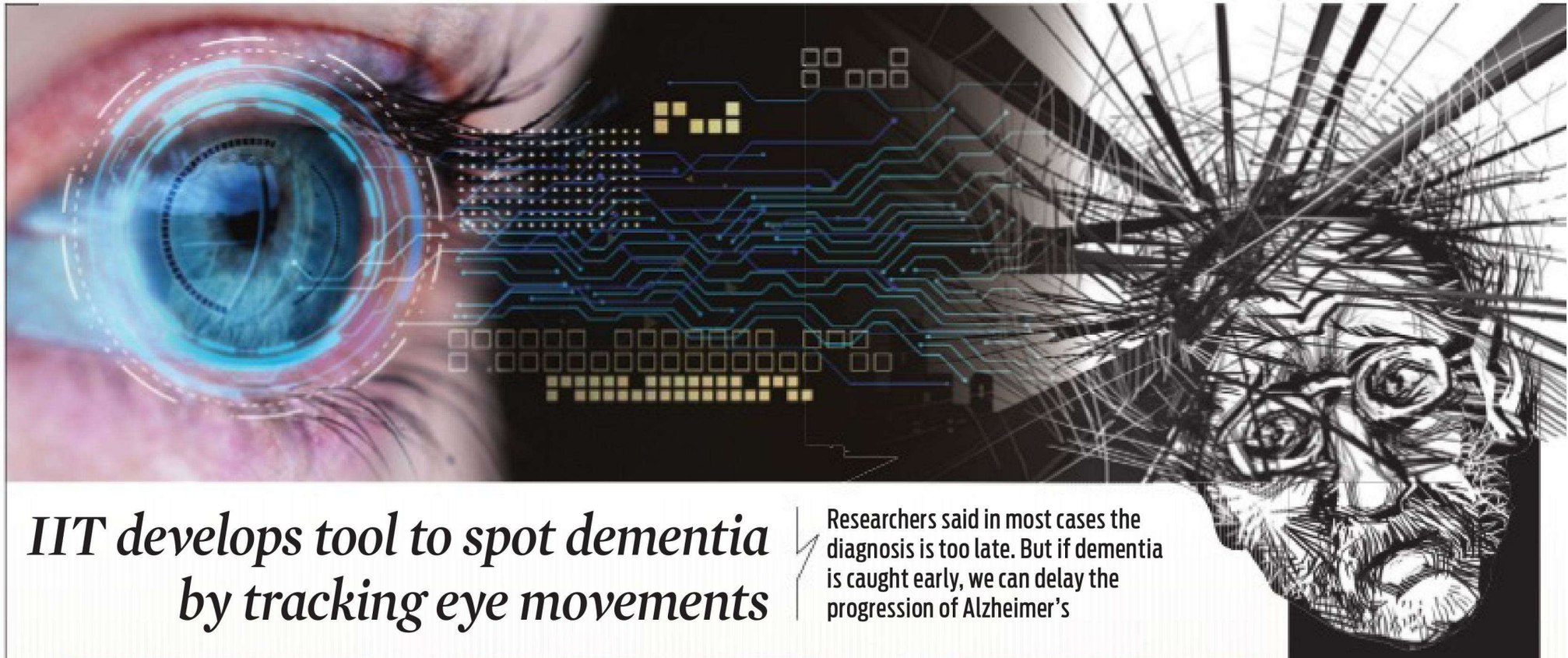

IIT develops tool to spot dementia by tracking eye movements

Researchers said in most cases the diagnosis is too late. But if dementia is caught early, we can delay the progression of Alzheimer's

EARLY DIAGNOSIS

Scientists at IIT Gandhinagar have developed a technology that can non-invasively diagnose dementia by tracking a person's eye movements, much before the symptoms appear

With a significant rise in ageing population, neurodegenerative disorders are becoming a serious health issue.

The results were presented this month at the Faculty of Old Age Psychiatry Annual Conference held in the UK

The technology has been handed over for a larger clinical trial in Kolkata and Gujarat

THE METHOD

Lahiri's team, which included Ritika Jain and Valay Patel, developed the 'MindEye' project that can track a person's eye movement, quantifying gaze in terms of reaction time and correct fixations, in response to visual stimuli presented on computer monitor

A stimulus — dots appearing at certain portions of the screen at certain angles — is presented. People with dementia often have issues with following the dot or fixing their gaze

Researchers can map the eye movements in response to the stimulus. They can identify subtle patterns that predict whether the person suffers from mild cognitive impairment

THE RESEARCH

1,600 people

have been screened for the research

The researchers used standard tests — long questionnaires that a patient answers with the help of a psychiatrist to validate their results.

WHAT IS DEMENTIA?

Dementia is a general term for a decline in mental ability severe enough to interfere with daily life. Memory loss is an example. Alzheimer's is the most common type of dementia

DISEASE BURDEN

40 million

people in the world are living with Alzheimer's and the figure is likely to touch

150 million

by 2050

4 million

(approx)

people in India have some form of dementia

Source: PTI

While dementia cannot be cured, its progression can be delayed if diagnosed early