

Sleep apnea can lead to memory loss: Study

'Impaired Breathing During Sleep May Damage Brain'

Kounteya Sinha | TNN

New Delhi: Loud snoring can seriously affect your memory.

In what will come as a stern warning for 36 million Indians, American and Indian scientists have for the first time jointly discovered that people with obstructive sleep apnea (OSA) suffer tissue loss in brain regions that help store memory.

This has been reported by

researchers from Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, and UCLA (University of California, Los Angeles) in the June edition of the journal 'Neuroscience Letters'.

The study focused on structures called mammillary bodies — involved with the processing of recognition memory on the underside of the brain. The team scanned the brains of 43 OSA patients, us-



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ing MRI to collect high-resolution images of the entire brain, including slices of the

mammillary bodies. The structures' small size makes them difficult to measure by conventional MRI.

When they compared the results to images of 66 control subjects, the scientists discovered that OSA patients' mammillary bodies were nearly 20% smaller, particularly on the left side. "The findings are important because patients suffering memory loss from other syndromes, such as alcoholism or Alzheimers disease, also show shrunken mammillary bodies," said lead author Rajesh Kumar, assistant researcher in neurobiol-

ogy from SGPIMS.

"Our findings, therefore, demonstrate that impaired breathing during sleep can lead to a serious brain injury that disrupts memory and thinking," said principal investigator Ronald Harper, professor of neurobiology at UCLA. "The fact that patients' memory problems continue despite treatment for their sleep disorder implies a long-lasting brain injury," Harper added.

Sleep apnea occurs when a blocked airway repeatedly halts the sleeper's breathing for 10 seconds, at least five times per hour of sleep. Un-

treated OSA can cause high blood pressure, ultimately causing heart attacks and stroke. It also increases risk of diabetes, impotency, irregular heartbeats and automobile accidents due to excessive daytime sleepiness.

ENT specialist from AIIMS K K Handa says nearly 60% of those who snore suffer from OSA. "I am not surprised by this finding, especially because OSA reduces oxygenation to brain tissues and the central nervous system. At present in India, even children are suffering from OSA," Dr Handa added.