Research in the News

alzheimer's wa
the dementia experts

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1. Researchers in Washington have identified an antibody that clears amyloid deposits from the brain without the risks associated with previous experimental treatments. In the past, several antibodies that can reduce amyloid buildup in the brain have been discovered but all with one serious side effect – brain swelling and bleeds. The newly-identified antibody (HAE-4) targets a specific component of amyloid plaques known as apoliproprotein E (APOE) and triggers the removal of plaque from brain tissue and blood vessels without causing the unwanted side effects. Studies in mice showed the new treatment significantly reduced amyloid plaques and improved the ability of brain blood vessels to dilate and constrict on demand, which demonstrates good vascular health.
   https://www.sciencedaily.com/releases/2021/02/210217151118.htm

2. According to researchers in the UK, people with prediabetes may have an increased risk of cognitive decline and vascular dementia. Analysing data collected from over 500,000 people in the UK Biobank, the researchers found that people with higher than normal blood sugar levels were 42% more likely to develop cognitive decline over an average of four years, and were 54% more likely to develop vascular dementia over an average of eight years. This is the first study to investigate the possible link between high blood sugar levels (that have not yet turned into diabetes) and cognitive decline.
   https://www.sciencedaily.com/releases/2021/02/210211195335.htm

3. Scientists in China claim taking an afternoon nap may be linked to better mental agility. A study of over two thousands participants aged 60 years and over, showed that those who took a nap after lunch for between five minutes and two hours had higher cognitive functioning, including locational awareness, verbal fluency, working memory and problem-solving.
   https://www.sciencedaily.com/releases/2021/01/210125191846.htm

4. Researchers from the University of Kentucky claim it may be possible to predict a patient's risk of developing cognitive decline by studying specific patterns of frontal brainwaves during everyday memory tasks. Current standard behavioural testing may be less effective than measuring select brain "signatures" that occur duing mental activity, such as remembering where a car is parked in a parking lot. The researcher's work suggests examining such signatures could predict cognitive decline up to five years earlier than clinical

diagnosis.
https://neurosciencenews.com/mci-risk-prediction-17686/

5. Severe perivascular space disease (the presence of enlarged fluid-filled spaces in the brain around small blood vessels) may be a risk factor for dementia, according to researchers from Sydney. Their study of over 400 people, with an average age of eighty years, involved cognitive tests of thinking and memory skills, reassessed over an eight year period. The researchers found that the people with the largest number of enlarged perivascular spaces were almost three times more likely to develop dementia than people with fewer or no enlarged spaces. One possible theory for the link is that enlarged perivascular spaces may be a biomarker for impaired waste removal in the brain.
https://www.sciencedaily.com/releases/2021/01/210127171851.htm

6. People with schizophrenia are 25 times more likely to develop dementia by the age of 66, according to a study led by Columbia University in New York City. By age 80, this prevalence rose to 70.2%. Individuals with schizophrenia typically develop various diseases at younger ages than the general population, including cognitive diseases, and further investigation is needed to determine why this may be the case. Experts suggest that dementia and schizophrenia may be under-diagnosed or even misdiagnosed, with understanding of both diseases sometimes lacking in medical professionals. Further investigation is required to determine what links there may be between the two and, just as importantly, how people living with both diseases can be supported.
https://www.medpagetoday.com/psychiatry/generalpsychiatry/91574

7. Hydrogen sulphide, typically characterised as smelling of rotten eggs,may have a protective quality that prevents Alzheimer's disease developing in aging brain cells, according to researchers from Johns Hopkins Medicine. Our body naturally creates small amounts of hydrogen sulphide, which assists with biological processes, such as blood vessel dilation and cell metabolism. In Alzheimer's mouse studies, subjects injected with NaGYY, a carrying compound which slowly releases the hydrogen sulphide molecules while travelling throughout the body, were found to have improved cognition and motor function. Subjects appeared to have better memory and were more physically active than their untreated counterparts.
https://www.sciencedaily.com/releases/2021/01/210112110103.htm