

Scientists Claim a Mouth Bacteria May Be Responsible for Alzheimer's disease

Zoe McAlister February 08, 2019



New discoveries related to a mouth bacteria Porphyromonas Gingivalis toxins are even more terrible when we know that about a third of people have gum disease.

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([Newswire.net](#) -- February 8, 2019) -- Several laboratories in different parts of the world, independent from each other, are gradually closing in on the Alzheimer disease cause, and they all point to bacteria called Porphyromonas Gingivalis that dwells in mouth, [NextBigFuture reports](#).

Toxins of these bacteria can be blocked by drugs and thus stop the progress of Alzheimer's disease, or can even reduce the symptoms. The large clinical study that will be launched to examine the effects of such a drug, and a vaccine against Alzheimer's and the bacterium of the causative agent have also been mentioned.

If a clinical study confirms the responsibility of these bacteria in the development of Alzheimer Disease, this could be considered one of the major discoveries of the 21st century, given that, according to the World Health Organization, there are around 30 million people in world living with Alzheimer's.

Every two decades, the number of patients is doubled, and dementia is currently in incline as Alzheimer's is, by far, the largest cause of dementia. Also, Alzheimer's disease is the fifth most common cause of death, the report [published by NBF](#) says, adding that the disease is much more common in underdeveloped countries. The report predicts that the biggest epidemic of Alzheimer's is expected in the coming decades in China and India.

New discoveries related to the toxins from the mouth bacteria Porphyromonas Gingivalis are even more terrible when we know that about a third of people have gum disease.

Researchers explain that the accumulation of Tau and amyloid proteins in the brain is associated with the development of Alzheimer's disease because they destroy neurons. This connection has been examined for many years, but it wasn't convincing enough. Namely, it has been established that it is possible that those toxins are present in the brain, but it is not yet confirmed they cause the illness.

The analysis of the brains of people who lived for more than 90 years and who retained great memory for the entirety of their lives showed that even their brains had signs of advanced Alzheimer's disease, above all a significant amount of amyloid and so-called plaque. However, for some reason, the disease did not manifest itself.

The brain analysis prompts scientists to conclude that amyloids are not the cause of the disease. However, a recent study has focused on this topic by examining the memory link and the presence of Porphyromonas Gingivalis in the blood. The higher the level of bacteria that was present, the worse was the state of the patient's brain.

The connection was then proven by testing in mice, an article [published in National Geographic](#) say. As soon as the researchers infected rodents with these bacteria, mice began to form brain protrusions, and the disease began to develop.

The Pharmaceuticals company Cortexyme from San Francisco, USA, who led this study, then gave antibiotics to the diseased mice to destroy this bacterium, but the effect of the treatment was not very significant and the bacteria soon became resistant.

Further in the fight to suppress bacteria, scientists developed a substance, the so-called bacterial protease inhibitor, which blocks the formation of harmful proteins, and in already infected mice the infection has decreased. Also, some damaged neurons start to repair.

The work was signed not only by the pharmacists from the aforementioned Californian company, but also by researchers with a total of 13 reputable universities and medical centers that came together to the same conclusion, the Nat. Geographic article says, adding that scientists are on the trail on the most important medical breakthrough in this century – finding a cure for Alzheimer's disease.

Source: <http://newswire.net/newsroom/news/00107599-scientists-claim-a-mouth-bacteria-may-be-responsible-for-alzheimer-s-disease.html>