

Letter to Editor

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More bacteria in the Alzheimer patients' brain toward healthy people

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Dear Editor,

Alzheimer's is an aggressive brain disease in which brain cells become destroyed and die, finally its result is shrinkage of the brain^[1]. Precisely what makes this cerebrum cell demise is not known, but rather it's felt that irregular development of a protein called beta-amyloid assumes a key importance.Keeping active, maintaining a healthy sleep pattern, and inducing the mind are all good pathways in which human can try and decrease the risk of Alzheimer's disease^[2-4].

The body's blood-brain barriernormally avoids microorganisms and unique synthetic substances from entering the cerebrum, this boundary may not work totally in individuals in danger for Alzheimer's infection, and microscopic organisms may in truth get into the mind^[4].For the most part, the brains of patients with Alzheimer appear to decide both expanded bacterial populaces and distinctive rates of particular microbes contrasted with sound brains^[5]. This can be a direct result of certain hereditary hazard factors in Alzheimer's infection that may cause veins to lose some of their uprightness, possibly enabling microbes to enter and colonize the cerebrum^[5]. The most of bacterial species identified are including those are related to the skin, mouth, and nose^[5].

The Alzheimer's patients have higher rates of microscopic organisms identified with a family called *Actinobacteria*^[5]. In a few examinations, the specialists discovered more elevated amounts of microscopic organisms called *Propionibacterium acnes*, which is connected to skin break out, however has additionally been found to develop in the cerebrum and may cause aggravation in the body^[5, 6]. *Propionibacterium acnes* can be a very good candidate for a bacterial source of neuroinflammationin the brains of Alzheimer's patients^[1-5].

Also, Herpes simplex virus type 1 (HSV-1) infection has been a fundamental operator in the etiology of Alzheimer. Without a doubt, it is viewed as that dormant HSV-1 in the trigeminal ganglia could go to various mind areas to fortify Alzheimer. Another recommendation is that a few microorganisms, for example, *Chlamydophilapneumoniae*, are associated with illness pathology^[5, 6].

Several fungal species in cerebrum tissue of patients have been distinguished. Despite the fact that these species shift between patients, those having a place with the genera *Alternaria*, *Botrytis*, *Candida*, *Cladosporium*, *Cryptococcus*, *Fusarium*, *Malasezzia* and *Penicillium* are especially predominant^[5, 6].

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Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran Tel: +98-9132531389 E-mail: shahcheraghih[at]gmail.com This letter demonstrates that new world needs more quantitative examinations on the life forms nearness in the brain.

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