

Gingival Disease And Alzheimer's

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Introduction

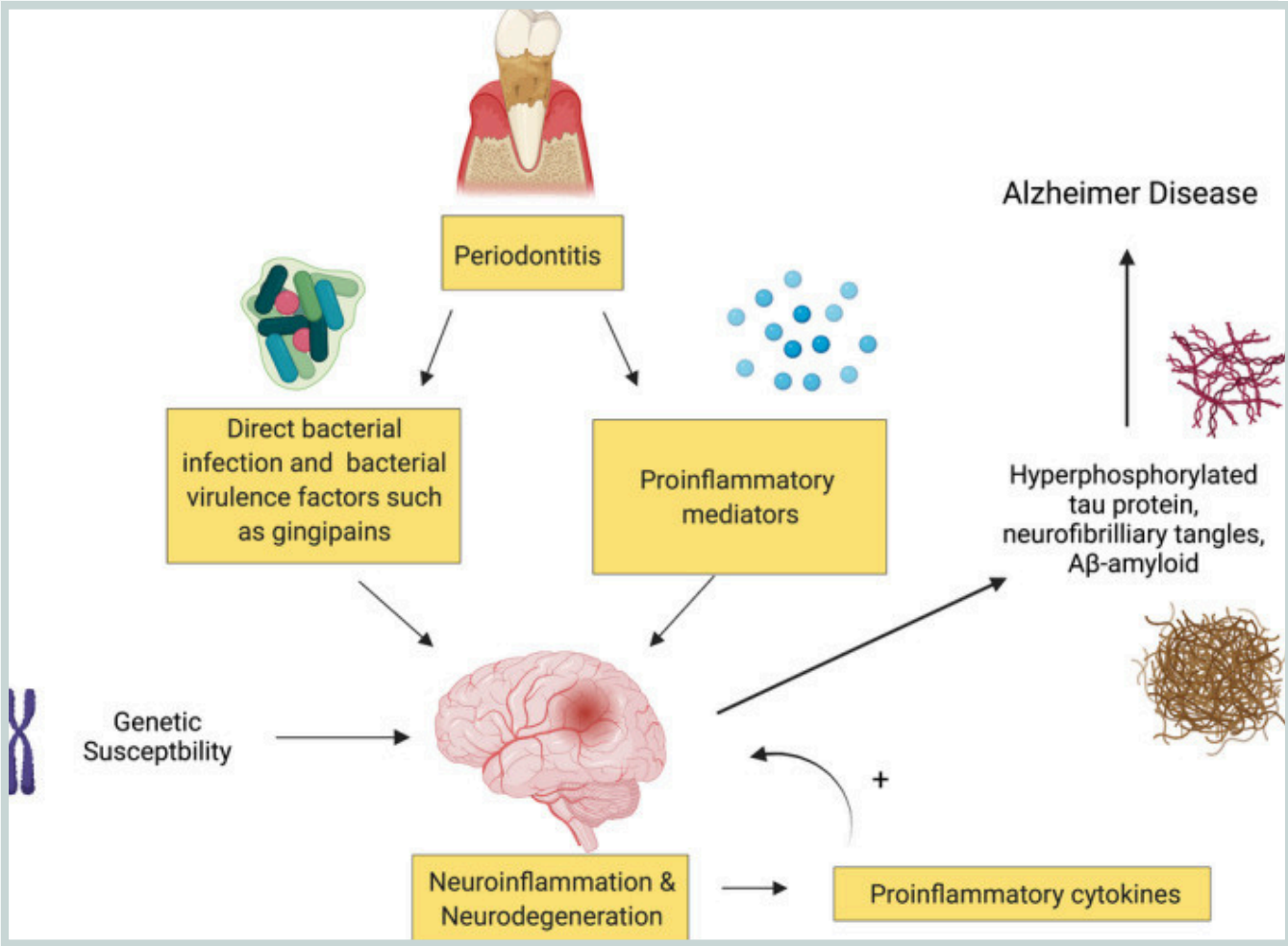
Mental health disorders affect a large portion of the world’s population. Several physiological causes have been identified for these disorders, including the pituitary gland, adrenal gland, autonomic nervous system, and immune system. Additionally, life events, environmental factors, and lifestyle influence the onset and development of mental disorders. Gingivitis, for example, has been linked to mental health disorders (such as Alzheimer’s and dementia) with more severe gingivitis associated with these conditions. In some cases, non-surgical treatment of gingivitis results in mental behavior modification and reduces symptoms of dementia and Alzheimer’s [1].

The Link Between Gingival Disease And Alzheimer’s

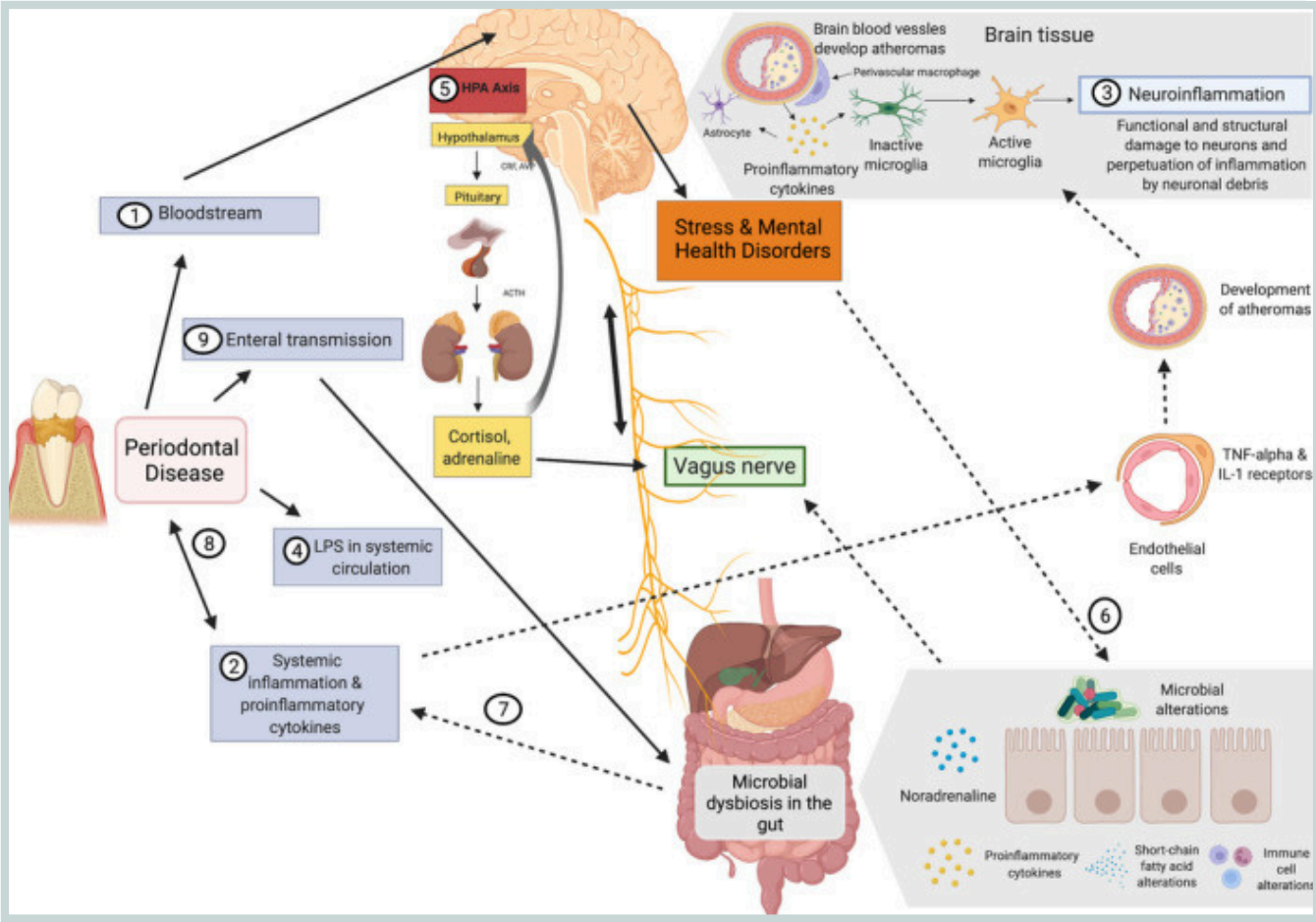
A recent study published in the Int J Environ Res Public Health(2021) aimed to determine the relationship between periodontal disease and Alzheimer’s disease. The study found a correlation showing that all Alzheimer’s patients aged 65 had gingivitis. One significant finding of this study highlighted common causes of periodontal disease, including bacterial infections by filamentous, pathogenic, and anaerobic bacteria. These bacteria are among the primary causes of gum disease in the elderly and are some of the most widespread pathogens among humans. As a result, the study emphasized the high likelihood of bacterial infections spreading to nerve cells, potentially leading to deterioration or damage in some cases, followed by an increased risk of dementia and Alzheimer’s [2].

Additionally, another study explored the link between gingivitis and digestive system disorders. Risk factors associated with gingivitis include poor oral hygiene, smoking, diabetes, aging, genetic factors, and certain medications. Harmful oral bacteria can accumulate and cause gum disease, potentially spreading to the stomach through saliva [3].

According to another study published in the Journal of Science Advancement, the bacteria Porphyromonas gingivalis, the primary cause of gingivitis, caught researchers’ attention due to its presence in the brains of Alzheimer’s patients after brain autopsies. It was discovered in the brains of 51 out of 53 patients studied, confirming a strong link between gingivitis and Alzheimer’s disease [4].



• Figure 1, Mental health and periodontal and peri-implant diseases.



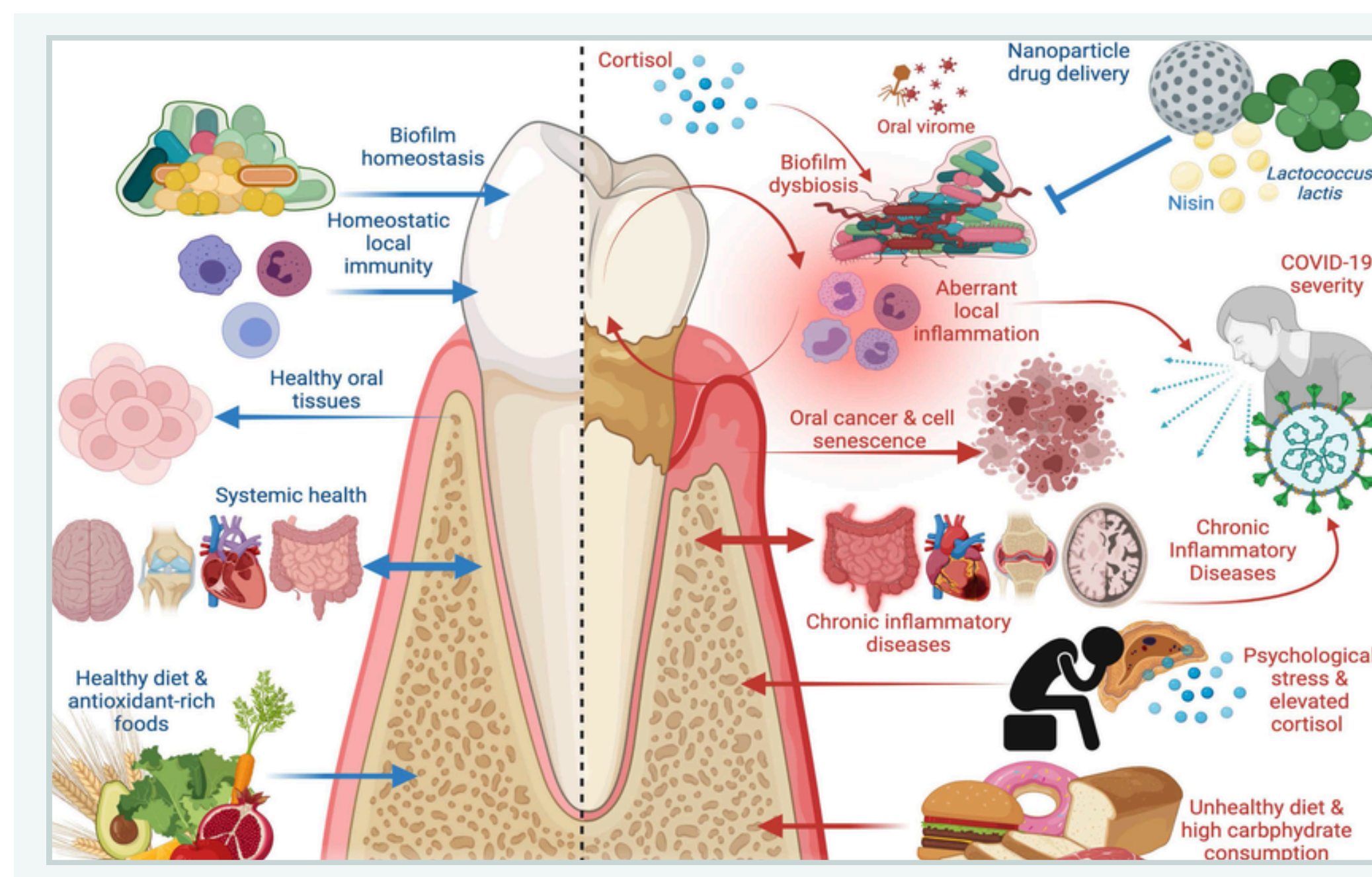
• Figure 2, Mental health and periodontal and peri-implant diseases.

Prevention And Treatment

Maintaining oral and gum health can help reduce the risk of Alzheimer's. Preventive measures include daily oral hygiene, such as brushing teeth, flossing, and regular dental check-ups. Additionally, a healthy diet, regular physical activity, and avoiding smoking are believed to support overall health and may also reduce the risk of neurological diseases[5].

Conclusion

While research is ongoing to understand the precise relationship between gum disease and Alzheimer's disease, maintaining oral and dental health can be an important step toward reducing the risk of developing neurological diseases. To determine the type and strength of the connection between gum disease and Alzheimer's, as well as effective prevention methods, further studies are still needed [6].



• Figure 3, Periodontal Disease: The Good, The Bad, and The Unknown.

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