Literature Review: The Correlation Between Age and Periodontal Disease

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Literature Review: The Correlation Between Age and Periodontal Disease

Periodontal disease is one of the most common oral conditions around the world, it involves gingivitis, chronic periodontitis and aggressive periodontitis. There are a lot of different variables that go into those disorders. *The Correlation Between Age and Periodontal Disease* by Tadjoedin et al. (2017), by comparing thousands of samples, looked at the relationship between age and periodontal disease and helps us understand how these diseases increase or decline with time.

Periodontal Disease and Age Distribution

The article states that plaque bacteria are the main cause of periodontal disease, but it is also influenced by other factors.

By collected 2,069 medical records between 2004 to2014, the study categorizing patients into seven age groups. They found that gingivitis is most common in late adolescence (17-25 years), while chronic periodontitis predominantly affects the early elderly group (46-55 years). Aggressive periodontitis peaks in the late adult age group (36-45 years) (Tadjoedin et al., 2017). Based on these findings that age is one of the key factors in the onset and progression of periodontal diseases, likely due to tissue degeneration and long-term exposure to risk factors.

Severity and Progression

The study also shows a weak but positive correlation between age and disease severity ($r = 0.251$). Chronic periodontitis appears frequently across all age groups but gets worse with age. Such as, 56% in the adolescence group, 74% in the adult group, and 88% in the elderly group (Tadjoedin et al., 2017). While these numbers highlight the impact of accumulated tissue damage over time. However, not all elderly individuals experience severe periodontal disease. Which means Preventive care and early interventions might play a role in alleviate the trend.

Factors Contributing to Periodontal Disease in Aging Populations

Besides, the study concludes that aging-related factors, like weaker immunity and long-term exposure to bacterial plaque, contribute to higher risk. However, regular dental care in older adults is linked to less attachment loss, once again, highlighting the importance of prevention in slowing disease progression.

Conclusion

The study provides a clear picture of how age influences periodontal disease patterns and progression. Chronic periodontitis stands out as the most common form particularly in older adults, emphasizing the need for targeted prevention and treatment strategies. Although there were some limitations, like missing data for mild gingivitis cases. These findings provide a foundation for creating age-specific periodontal care to enhance oral health, it also gives space for further research.

References

Tadjoedin, F. M., Fitri, A. H., Kuswandani, S. O., Sulijaya, B., & Soeroso, Y. (2017). The Correlation between Age and Periodontal Diseases. Journal of International Dental and Medical Research, 10(2), 327-332. https://www.proquest.com/scholarly-journals/correlation-between-age-periodontal-diseases/docview/1931139055/se-2