



Abstract

Stroke as a major disease which has many risk factors seriously endangering the health of Chinese residents. Infection and systemic inflammation diseases are one of the driving factors of Stroke. Common oral infectious diseases include periodontitis, gingivitis, dental caries, endodontic disease may related to the induction of Stroke. This paper reviewed the research progress of common oral infectious diseases on promoting Stroke and related prevention ways. Expounding the relationship between common oral infectious disease and Stroke, so as to improve the health literacy and provide a theoretical basis for reducing the risk of Stroke, and put forward relevant measures for individuals and medical institutions to promote the oral health.

Common Oral Infectious Diseases

1. Periodontitis

Periodontitis is a classical chronic infectious disease caused by microorganisms in dental plaque.

Incidence: 45%~50% worldwide^[1], 40% ~ 60% in China.

Evidence:

- A significant link between periodontitis and cardiovascular disease (The expert consensus of the European Federation of Periodontology and the American periodontal society)^[2].
- Compared with patients without periodontitis or mild periodontitis, patients with clinical diagnosis of periodontitis had an increased risk of cerebrovascular events (A systematic review of three case-control studies and cohort studies)^[3].

Treatment: primary prevention (effective and economical)^[4]

Terrible situation (China) :

- 33.7% of patients know the importance of floss or tooth space brush^[5].
- 35.2% of patients know the role of scaling^[5].

2. Gingivitis

Gingivitis is generally caused by the accumulation of dental plaque which mostly due to inadequate daily oral cleaning.

It is difficult to clarify the relationship between gingivitis and stroke. The relationship between gingivitis and stroke has not been unified.

Evidence:

- A significant association between gingivitis and cerebral infarction (A prospective cohort study)^[6].
- Periodontitis and tooth loss were risk factors for stroke, and the existence of gingivitis was not significantly associated with the risk of stroke (meta-analysis included in 9 cohort studies)^[7].

Lack of high-quality studies to prove the relationship between gingivitis and cardiovascular disease.

Enhancing oral hygiene is still important to maintain oral health .

Common Oral Infectious Diseases

3. Dental caries and pulp disease

Dental caries is a chronic infectious disease characterized by progressive destruction of dental hard tissue. Microbial infection which mainly comes from caries is the main pathogenic factor for pulp disease .

Evidence:

- Only some evidence that caries and infection were associated with cardiovascular disease (A British summary of evidence)^[8].
- The prevalence of dental caries in stroke patients is significantly higher than that in healthy people, and the oral medical behavior of stroke patients is also significantly lower than that of healthy people (A systematic review)^[9].
- Patients who did not complete root canal therapy had a higher risk of cardiovascular disease (A population-based study)^[10].

Expectation & Enlightenment

- The prevention literacy of oral diseases of Chinese residents needs to be improved, and the establishment of oral health behavior needs to be accelerated.
- Medical institutions still need to improve the service system and comprehensively cooperate to promote the overall health of population.
- We still need to strengthen the construction of professions major in oral health and broaden the training mode for these population.

Reference

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