

R-10. Prevalence of seven periodontopathic bacteria in aggressive periodontitis patients in Japan

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Actinobacillus actinomycetemcomitans is considered as main etiologic agent of aggressive periodontitis. Other periodontopathic bacteria like *Porphyromonas gingivalis* are also suspected of participating in aggressive periodontitis though it is obscure. The aim of the present study was to investigate the prevalence of seven periodontopathic bacteria and to clarify the microbiological features of aggressive periodontitis patients in Japan. Subgingival plaques were collected from 50 aggressive periodontitis patients (localized 10, generalized 40). Samples from 35 generalized chronic periodontitis patients and 20 healthy subjects were also collected as controls. Polymerase chain reaction (PCR) and bacterial culture were performed for bacterial analysis. *A. actinomycetemcomitans* was very low prevalence in localized (20%) and generalized (17.5%) aggressive periodontitis patients, and no significant difference were observed in detection frequency of this bacterium between aggressive periodontitis and control groups. While, *Bacteroides forsythus*, *Campyrobacter rectus*, *P. gingivalis* and *Treponema denticola* were frequently detected (more than 75%) from localized and generalized aggressive periodontitis patients. The prevalence and proportion of *P. gingivalis* was elevated at sites showed deep periodontal pockets in localized and generalized aggressive periodontitis patients. In conclusions, *B. forsythus*, *C. rectus*, *P. gingivalis* and *T. denticola* were predominant periodontopathic bacteria of aggressive periodontitis patients in Japan. Especially, *P. gingivalis* was strongly associated with aggressive periodontitis. Although *A. actinomycetemcomitans* was found in aggressive periodontitis patients, the prevalence of this bacterium was much lower than that of *P. gingivalis*.