Oral Cavity Infections and The Relations to The Systemic Diseases Abdullah Sameer Azeez

The University of Georgia, School of Health Sciences and Public Health Student, Dental program in English

The oral cavity contains some of the most varied and vast flora in the entire human body and is the main entrance for 2 systems vital to human function and physiology, the gastrointestinal and respiratory systems, a specific pathologic condition, such as periodontitis (i.e., inflammation of the periodontal attachment of the teeth and the alveolar bone), may be present in the oral cavity. These specific conditions can affect many other vital systems, such as the cardiovascular and renal systems abscesses (i.e., inflammation and abscess of the tissue attached to the apex of the root) may lead to subacute bacterial endocarditis (BE) and glomerulonephritis (GN). The microenvironment of the oral cavity changes with the age of the patient, the eruption or loss of teeth, and the appearance of disease states (e.g., caries, periodontal disease). Systemic changes, such as pregnancy or drug intake, also alter the number and proportion of flora. These changes are due to alterations in the flow and composition of salivary fluid and in the levels and activity of defense components (e.g., immunoglobulins, cytokines) in the saliva. Effective strategies to prevent and control infectious diseases require a basic understanding of the causative agent, the pathogenesis of the disease, and the individuals at risk. Intervention can occur at any of these three points in the natural history of the disease. Attempts to control oral infections have met with limited success. Two of the most common oral infectious diseases, caries and periodontal disease, are among the most common Careful examination of the oral cavity may reveal findings indicative of an underlying systemic condition, and allow for early diagnosis and treatment. Examination should include evaluation for mucosal changes, periodontal inflammation and bleeding Oral findings of anemia may include mucosal pallor, atrophic glossitis, and candidiasis. Oral ulceration may be found in patients with lupus erythematosus, pemphigus vulgaris, or Crohn disease. periodontal inflammation or bleeding should prompt investigation of conditions such as diabetes mellitus, human immunodeficiency virus infection, thrombocytopenia, and leukemia. In patients with gastroesophageal reflux disease, bulimia, or anorexia. Periodontitis is a common chronic bacterial infection of the supporting structures of the teeth. The host response to this infection is an important factor in determining the extent and severity of the disease. Systemic conditions may modify the extent of periodontitis principally through their effects on normal immune and inflammatory mechanisms. In very rare cases, bacteria in the mouth may trigger endocarditis in people at higher risk. Here's what happens: Bacteria found in tooth plaque may multiply and cause gingivitis (gum disease). If not treated, this may become advanced.

Abbreviations: bacterial endocarditis (BE) and glomerulonephritis (GN).

Key words: periodontitis, streptococcus infections, infections control, early detection, preventions tools, immunity.