

## Determining the Prevalence of Aerobic, Facultative and Obligatory Anaerobic Bacteria in Oral Cavity Infections

Safieh Gafel\*; Mohammad Najafi Mosleh; Rasoul Yousefi Mashoof

*Department of Microbiology, Faculty of Medicine, Hamadan University of Medical Sciences, Hamedan, Iran*

safighafel@yahoo.com

**Background & Objectives:** many infections of the oral cavity and adjacent structures involve anaerobic bacteria. Most infections involve multiple anaerobes and in many instances facultative organisms. The aim of the this study is determining the prevalence of obligatory anaerobic bacteria in oral cavity infections.

**Methods:** Specimens were taken from oral cavity infections. Routin standards culture technique & strict anaerobic techniques were used for isolation & identification of aerobic, facultative & obligatory anaerobic bacteria respectively.

**Results:** Under the anaerobic atmospheric system, different anaerobic species belonging to the Peptostreptococcus, Prevotella, Fusobacterium, Porphyromonas and Bacteriodes genera are isolated, as well as facultative & aerobic species include Streptococcus, Staphylococcus, interobacteriaceae & Actinomycetes israelii also are obtained.

**Conclusion:** Because oral infections are common, the physician must understand the underlying etiology, pathogenicity, and other variables that determine how these processes evolve in order to choose the most appropriate antibiotic drug. The special characteristics of the oral cavity determine the make-up of the microflora that lives there. Virtually all clinically important oral cavity infections & adjacent structures involve anaerobes. From these sites, infection may spread to the blood & CNS; some of these infections can be quite severe and even life threatening.

**Keywords:** Anaerobic; Bacteria; Prevotella; Porphyromonas