THE PROFILE OF ANAEROBIC ORGANISMS IN ORO-FACIAL INFECTIONS

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The oral cavity has a complex ecosystem which harbours several hundreds of different bacteria, fungi and protozoans. Oral microbial ecology explains the interrelationship of organisms and their environment. Four major ecosystems have been identified in the oral cavity i.e. the buccal mucosa, dorsum of the tongue, supragingival tooth surface, and subgingival tooth and crevicular epithelial surfaces. Each has a distinct combination of oral microbial flora associated with them.[38]

More than 300 species of bacteria are recognized today as normal inhabitants of the oral cavity. Many new species of bacteria were being isolated from the oral cavity, but remain yet to be classified. Depending upon the influence of oxygen on growth and viability, bacteria are broadly divided into aerobes and anaerobes.[34]

At birth the oral cavity is sterile. Simple primary facultative flora becomes established within 6 to 10 hrs. Anaerobes are considered to appear in some mouths within first 10 days and most commonly found in all the mouths during the eruption period of deciduous incisors (5 months of age). The number of anaerobes increase with the age while the facultative organisms remain numerically constant. The microscopic count of organisms in saliva range from 43 million to 5.5 billion organisms per millilitre with an average of 750 million.[35]

Colonization of anaerobic bacteria is influenced by varied oxygen supply in different parts of oral ecosystem. Anaerobes will colonize in areas where low oxygen-reduction potential exists (e.g.