

Clinical features of *Streptococcal Sp.*

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INTRODUCTION

Streptococcal infection is an infection caused by streptococcus species which is a gram positive coccus. The shape of the bacteria is spherical or round with 10 µm of diameter. *Streptococcus* bacteria belongs to the family streptococcaceae, order of the bacteria is lactobacillales and in the phylum firmicutes. They are found in pairs and chain like structures because the cell division of streptococcus occurs in a single axis. The chain like structure of streptococcus may appear as bent or twist. There are many strains of streptococcus that lives naturally in an individual and do not show any symptoms. *Streptococcus* are important pathogen of human that causes pyogenic infection, this infection has characteristics tendency to spread. This type of coccus can cause non-suppurative lesions such as ARF [Acute Rheumatic Fever] and glomerulonephritis. At the time of microbiological investigation, it is required to add some carbohydrate that must be fermentable (eg; glucose), blood or serum. They do not grow properly in simple media.

CLASSIFICATION

Streptococcus are classified as for their oxygen requirement first one is aerobic and facultative anaerobes and second is obligate anaerobes i.e. eg is peptostreptococci. Further aerobic and facultative anaerobes classified as per their hemolytic activity that is alpha hemolytic, beta hemolytic, gamma haemolytic these three haemolytic reactions appearing on blood Agar when streptococcus is investigated in laboratory obligate anaerobes are non-sporing anaerobes

A. Alpha haemolytic *Streptococci*

due to partial haemolysis this coccus produces greenish discoloration around the colonies the size of the zone of innovation is about 1 to 2 mm wide this can be observed under microscopically two types of streptococci show alpha hemolytic properties these are *Streptococcus pneumoniae* and viridians streptococci.

B. beta haemolytic *Streptococci*