Aims & Objectives
Mycobacterial infection is a public health problem particularly in developing countries; commonest clinical presentation is in the form of pulmonary tuberculosis. The incidence of extra pulmonary tuberculosis is also alarming. The commonest site for extra pulmonary tuberculosis in India is the lymph node system. Commonest Mycobacterium etiologic agent is Mycobacterium tuberculosis while *M. avium, M. scrofulaceum, M. chelonei* have also been documented. Environmental mycobacteria pose additional problems in the treatment. Geographic variation in etiology and drug resistance is widely observed. The diagnosis of lymph node tuberculosis is mainly relied upon the pathological evaluation of lymph node biopsy or Fine Needle Aspiration cytology. Demonstration of mycobacteria either smear or culture in fine needle aspirates is rather a more sensitive diagnostic test.

There are many reports on NTMs being associated with human infections involving lungs, lymph nodes, skin, and disseminated infections in immunocompromised individuals. Infection with the human immunodeficiency virus (HIV) is associated with an increased frequency of mycobacterial infections in general and lymph node tuberculosis in particular.

There is reported evidence of association of NTM with pulmonary tuberculosis (TB) in immunodeficient persons to a large
extent and also in immunocompetent persons sporadically. The current scenario of tuberculosis (TB) clinical spectrum shows that TB lymphadenitis is the second common site of TB after the lungs. However, there is a paucity of information on NTM causing lymph node tuberculosis, as much of the attention is focused on pulmonary tuberculosis. Hence the present study is aimed at identification and characterisation of mycobacterial isolates obtained from lymph nodes affected with tuberculosis.

### 3.2. Aim of the Study

- To identify and to characterize Mycobacterial isolates obtained from lymph node tuberculosis.
- To assess the diagnostic role of cytology and bacteriology of fine needle aspirate in lymph node tuberculosis.
- To observe the drug susceptibility pattern of *Mycobacterium tuberculosis* causing lymph node tuberculosis.