Abstract: Introduction: The diagnosis of tuberculosis is based on the detection of Mycobacterium tuberculosis on clinical specimens with different methods. Although there are many diagnostic techniques, such as culture and molecular methods, however, sputum smear microscopy for demonstration of acid fast bacilli remains the most important diagnostic method for tuberculosis in high prevalence countries due to its speed, easy performance, and low cost. The aim of this study was determination of prevalence of acid fast bacilli in specimens of suspected patients of pulmonary infections. The aim of present study was investigation of prevalence of AFB in sputum and bronchoscopic lavage samples of patients with pulmonary infections and determination of the reliability of the method.

Material and Methods: In total, 2872 specimens of sputum and bronchoscopic lavage were collected. For smear preparation, the specimens were decontaminated and processed. Prepared smears were stained by Ziehl-Neelsen staining method as per standard guideline and examined under the light microscope for the presence of acid fast bacilli.

Results: From total specimens examined, 1726 (60%) were isolated from male patients and 1146 (40%) were from females. One hundred eighty three (6.4%) were positive for acid fast bacilli. These were identified in 81.4% of sputum specimens and 18.4% of bronchoscopic lavages. The majority of smears were graded as 3+ according to criteria for AFB smear reporting.

Conclusion: The results of present study indicated that acid-fast stain (Ziehl Neelsen stain) is the preferable method for all suspected tuberculosis cases especially in settings that the number of specimens is high and the culture is not available.

sputum - bronchoscopic lavage - acid fast bacilli - tuberculosis

Presentation: Poster