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Retrospective study of tubercular lymphadenitis by FNAC and AFB stain in necrotic aspirate

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Abstract
Tuberculosis is rampant in our society and it's a norm in clinical practice in our country. It is the most common diagnosis that a clinician ends up with and histopathology is considered the gold standard for the diagnosis. The primary is always pulmonary and then many forms are discussed under the tuberculosis banner. This study puts in an effort to study the tubercular lymphadenitis by fnac and afb staining in necrotic aspirate of the lymph nodes.

Keywords: Tuberculosis, necrotic, aspirate, lymph node, acis fast

Introduction
As far as the history of men goes this disease is well associated with the mankind [1]. "King's evil" was the name given for such lymp node enlargement during olden days [2] the burden of this disease is huge and it is one of the most important causes of the mortality and morbidity in our country [3]. The primary is always pulmonary infection an the extra pulmonary infection has been identified more and more in the later decades of the 20th century [4]. In India, it accounts for atleast 20 percent of all the incidence of the disease [5-11]. It is more so seen in immune deficient individuals [11-15].
Fine needle aspiration cytology is considered the gold standard. Its simple, out-paqtient procedure and has been well accepted by the patients. In this study the, FNAC along with smear examination for afb will be undertaken for the diagnosis. This study puts in an effort to study the tubercular lymphadenitis by fnac and afb staining in necrotic aspirate of the lymph nodes.

Aims and Objectives: To study the efficacy of FNAC to diagnose the tubercular lymphadenitis.

Materials and Methods
A retrospective study of FNAC of cervical lymphadenitis was being studied from the year 2012 to 2014 in 100 patients. Patients with cheesy or pus like aspirate were subjected to H an E and AFB studies. The lymph noes was isolated between the thumb and the index finger and then the pus was aspirated. The aspirate were smeared and then subjected to Giemsa stain for cytology an ZN staining for Acid Fast bacilli.

Inclusion Criteria
1. Patients were more than 20 years.
2. Patients who had a history of previous TB

Exclusion criteria
1. Patients less than 20 years.

Results

Table 1: Sex ratio

Male	**68**
Female	32

Table 2: Age Distribution

20-30	**21**
30-40	34
40-50	11
50-60	09
>60 years	25

Table 3: Diagnosis based on the FNAC

Total	**100**
Diagnosis based on FNAC alone	46
Percentage	46 percent

Table 4: Diagnosis based on the further culture

Culture	**54**
Total positive	51

3 were unable to be diagnosed and re FNAC were done

Discussion

The extra pulmonary form of tuberculosis is most commonly encountered in our and othe developing countries worldwide. In developing countries almost 60 – 66 percent turns positive after this procedure. With previous history of TB then the diagnosis is more specific. FNAC as first line of investigation has assumed importance in diagnosing a variety of disease processes as it is rapid, simple, reliable, minimally invasive and cost effective procedure which can be used in outpatient setting. FNAC is economical and rapid as compared to culture studies (considered as gold standard but time consuming) and Polymerase chain reaction; which is expensive. Tuberculosis is very common in our country and tuberculous lymphadenitis is the most common cause of chronic lymphnode enlargement. Fine needle aspiration cytology is considered the gold standard. Its simple, out-paqtient procedure and has been well accepted by the patients. In this study the, FNAC along with smear examination for afb will be undertaken for the diagnosis. Though the most reliable criteria for diagnosing tuberculous lymphadenitis is demonstration of acid fast bacilli (AFB) by Ziehl- Neelsen (ZN) stain, auramine rhodamine stain or by polymerase chain reaction or culture of bacilli from aspirates. But considering the high tubercular disease burden and limited resources, in our population, the presence of epithelioid cell granuloma is considered as an evidence of tuberculous lymphadenitis.

Conclusion

Although it's a gold standard its safe to obtain the culture as it increases the chances of diagnosis for sure.

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