

Introduction

It is well recognized that LAP is the most frequent presentation of extrapulmonary manifestation in cases of pulmonary TB. Nevertheless, TB LAP still presents both a diagnostic and therapeutic challenge because it can be well confused with other pathological processes and at the same time the physical findings and laboratory investigations are not so conclusive in most of the cases. Thereby, making an accurate diagnosis is somewhat a difficult one and so may require excisional/incisional biopsy. Complete clinical history with thorough physical examination, staining for acid-fast bacilli (AFB), FNAC and polymerase chain reaction (PCR) are so helpful in making a correct diagnosis [1]. The most common presentation of extrapulmonary TB may be cervical swellings (92%), pyrexia, cold abscess, discharging sinus, chronic non-healing ulcers, anorexia and weight loss [2]. FNAC of cervical LAP has a high diagnostic accuracy. It provides important clues in subsequent guiding regarding the clinical management. However, for diagnosing other aetiologies of cervical LAP e.g. metastatic LAP, various types of lymphomas surgical biopsy and immunohistopathology may be required. It is recommended that there should be a free access for all patients with cervical LAP to Weekly Neck Lumps Clinic with standardized protocols for lymphoma diagnosis [4]. FNAC and PCR are commonly employed for detection of Mycobacterium Tuberculosis and should be used for the differential diagnosis of TB LAP [5]. It should be well remembered that Hodgkins lymphoma, squamous cell carcinoma, metastasis from papillary thyroid

carcinoma can coexist in cervical LAP [6]. The aim of study is an attempt to find out the frequency of TB cervical LAP, to assess other variables e.g. age, sex distribution, the value of clinical assessment and the most useful laboratory investigations to be used in diagnosis regarding its sensitivity, accuracy and cost-effectiveness.

Patients and Methods

This study was conducted for the period from 8/2/2008-8/2/2013 in Hilla General Teaching and Merjan Medical Teaching Hospital. It included recording of patients age, sex and clinical distribution of proven TB cervical LAP. The family history and the clinical presentation were reviewed. Related investigation e.g. complete blood picture, erythrocytes sedimentation rate and chest X-ray. FNAC was undertaken in all the cases. Culture for acid-fast bacilli and excisional/incisional biopsies were conducted whenever there were a non-conclusive FNAC results. Biostatistical analysis was done using SPSS version 13. The proportions of the causative aetiology were compared using Chi-square test and a value of more than 0.05 had been considered as insignificant in this report.

Results

The study included a 220 cases complaining of cervical LAP. There were 150 (68.2%) females versus 70 (31.8%) males. Majority of patients were between 15-53 years old. TB cervical LAP was the most dominant histological diagnosis (70.45%). Ninety per cent of the cases presented without any evident

constitutional symptoms whereas only (10%) exhibited suggestive symptoms. TB cervical LAP predominantly affected lymph nodes located in the posterior triangle of the neck. Three cases of mediastinal LAP with associating complaint of dysphagia had been observed together with TB cervical LAP. We observed also two cases of postauricular LAP due to TB. FNAC proved to be the most effective diagnostic test with a sensitivity of (93%).

Discussion

TB is a common clinical problem and is the commonest infectious disease affecting the lymph nodes in the body[7-8]. In a study conducted in Egypt, aetiology of cervical LAP was TB in (54%), reactive hyperplasia (33%) while metastatic LAP were (11%). The study revealed that FNAC was found to be highly effective diagnostic procedure in (95%) and that lymph nodes in the posterior triangle of the neck were most commonly involved[8,11]. Our study also revealed that TB is the main aetiology of cervical LAP but the results were relatively higher in comparison to other reports from different parts of the world. We should look carefully to the source of TB bacilli as there was no significant positive family history. In one report the most affected age group was 11-22 years and constitutional were absent in most of the cases. The upper deep jugular nodes were most commonly affected. Discharging sinus and abscess formation were uncommon. Chest radiological lesions were evident in (10%) of cases[9, 12,13]. As compared to that study the age group mostly affected was 14-45 years and the posterior triangle of the neck was the most involved area whereas other findings were nearly the same. Males were predominantly affected with TB cervical LAP in our

study in contrast to an Indian report which showed more female affection with TB cervical LAP[10-13]. This study showed that Cervical TB LAP usually presents with multiple lymph nodes involvement but without any constitutional signs and symptoms characteristic of TB infections. Clinically, the diagnosis of TB behistopathological investigations. It can be easily diagnosed depending on FNAC and PCR tests. Accordingly, if no improvement is observed in patients on anti-TB an excisional/incisional biopsy is recommended. This was detected in this study. ESR, Chest X-rays were not reliable in most of the patients so FNAC and excisional/incisional biopsy is the gold standard in any doubtful case.

Conclusion

This study revealed that the frequency of cervical TB LAP is high in our region. The real reason for this should be more carefully investigated. A high index of clinical suspicion is required as most of the affected cases can present without any suggestive constitutional signs and symptoms which are classically known to be secondary to TB infections in particular. We observed that ESR and chest radiography has a limited role in diagnosis of TB cervical LAP while FNAC was the procedure of choice although excisional/incisional biopsy may be indicated to settle the diagnosis in some cases.

References

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Table 1 demonstrating frequency of different cervical LAP aetiologies.

Aetiology	Patients Number	Percentage
TB cervical LAP	155	70.45
Reactive LAP	30	13.63
Cervical metastatic LAP	25	11.63
Cervical lymphoma	10	4.54
Non-specific LAP	5	2.27