



CODEN [USA]: IAJPB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

<http://doi.org/10.5281/zenodo.3364235>
Available online at: <http://www.iajps.com>

Research Article

FINE NEEDLE ASPIRATION CYTOLOGY (FNAC) EVALUATION OF LYMPH NODES AT TEACHING HOSPITAL

¹Dr. Sandesh Kumar, ²Dr. Ahmed Ali Danish, ¹Dr. Khalil Ahmed Shaikh,
³Dr. Hamid Nawaz Ali Memon, ²Dr. Samar Raza and ^{*1}Muhammad Jan Khetran
¹Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro, ²Liaquat University
Hospital Hyderabad / Jamshoro, ³Zulekha Hospital Dubai United Arab Emirates

Article Received: May 2019 Accepted: June 2019 Published: July 2019

Abstract:

Objective: To explore the fine needle aspiration Cytology (FNAC) evaluation of lymph nodes at teaching hospital.

Patients and Methods: A total of fifty patients were explored who were referred for FNAC of enlarged superficial lymph nodes were assessed and included in the study. Patients were interrogated in detail regarding their particulars, presenting complaints, past history and treatment received. The patients underwent FNAC evaluation of the enlarged lymph node(s), using a 22 or 23 gauge needle attached to a 10 cc disposable syringe. Consent of the patients was obtained in each case while all slides after staining were mounted using standard cover slips and then analyzed by standard microscopy whereas the frequency / percentages (%) and means \pm SD computed for study variables.

Results: During six month study period total fifty patients had lymphadenopathy were explored and study. The mean \pm SD for age (yrs) of population was 58.51 ± 7.81 respectively. Regarding gender male 35 (70%) and female 15 (30%) while regarding the distribution of lesions reactive hyperplasia 20 (40%), granulomatous lymphadenitis 12 (24%), acute suppurative lymphadenitis 06 (12%), necrotic lymph adenitis 05 (10%), lymphoproliferative disorder 04 (8.0%) and metastases 03 (6.0%)

Conclusion: FNAC is a helpful, moderately non - horrendous and fast technique for diagnosing the hidden pathology and is significant demonstrative device in the assessment of superficial lymph nodes.

KeyWords: Fine needle aspiration Cytology and Lymph node.

Corresponding author:

***Muhammad Jan Khetran,**

Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro.

Email: zulfikar229@hotmail.com

QR code



Please cite this article in press Muhammad Jan Khetran et al., *Fine Needle Aspiration Cytology (Fnac) Evaluation Of Lymph Nodes At Teaching Hospital.*, Indo Am. J. P. Sci, 2019; 06[07].

INTRODUCTION:

FNAC is a significant symptomatic apparatus for building up an analysis in instances of shallow lymphadenopathy [1]. The utilization of this procedure has restricted the requirement for extraction of augmented lymph hubs, particularly in instances of receptive and tubercular lymphadenitis. It is savvy, moderately less horrible, and empowers the pathologist to furnish the clinician with a conclusion in a brief span, and consequently is perfect particularly for OP patients [2]. Lymphadenopathy is a usually experienced clinical element [3]. The finding of the reason hidden the developed lymph node(s) empowers the clinician to plan suitable administration for every patient. Expanded superficial lymph nodes are effectively manageable to assessment by FNA method and consequently FNAC structures a significant indicative apparatus in the armamentarium of the pathologist [4]. This study was attempted to distinguish the reasons for lymphadenopathy among patients alluded for FNAC assessment of their enlarged lymph nodes to the research center at instructing emergency clinic.

PATIENTS AND METHODS:

A total of fifty patients were explored who were referred for FNAC of enlarged superficial lymph nodes were assessed and included in the study. Patients were interrogated in detail regarding their particulars, presenting complaints, past history and treatment received.

The patients underwent FNAC evaluation of the enlarged lymph node(s), using a 22 or 23 gauge needle attached to a 10 cc disposable syringe. Consent of the patients was obtained in each case while all slides after staining were mounted using standard cover slips and then analyzed by standard microscopy. The data was collected on pre-designed proforma and analyzed in SPSS to manipulate the frequencies and percentages.

RESULTS:

During six month study period total fifty patients had lymphadenopathy were explored and study. The mean \pm SD for age (yrs) of population was 58.51 ± 7.81 . The demographical and clinical profile of study population is presented in Table 1.

TABLE 1: The Demographical And Clinical Profile Of Study Population

Parameter	Frequency (N=50)	Percentage (%)
AGE (yrs)		
20-29	08	16
30-39	10	20
40-49	20	40
50-59	07	14
60+	05	10
GENDER		
Male	35	70
Female	15	30
RESIDENCE		
Urban	20	40
Rural	30	60
Distribution of Lesions		
Reactive hyperplasia	20	40
Granulomatous lymphadenitis	12	24
Acute suppurative lymphadenitis	06	12
Necrotic lymph adenitis	05	10
Lymphoproliferative disorder	04	8.0
Metastases	03	6.0

DISCUSSION:

Fine needle aspiration (FNA) was first presented by Greig and Gray. The utilization of this method has restricted the requirement for extraction of enlarged lymph nodes, particularly in instances of responsive and tubercular lymphadenitis. In this arrangement of cases, receptive lymph node hyperplasia was the

most well-known determination. Comparative discoveries were noted by Shrivastav An, et al, Mohanty R, et al and Pandey P, et al [5-7]. The general recurrence of pathologies differs with the kind of emergency clinic and the socioeconomics of the needy populace. In this investigation there was a prevalence of male patients (70%) which is

predictable with different examinations. Metastatic stores in the enlarged lymph hubs were analyzed in 07 cases while the comparative finding was accounted for by Ghartimagar D et al [8]. Lymphoproliferative issue were analyzed in just 8%, and formed a very small percentage of the complete pathologies detailed, a discovering which corresponds with different examinations. Different pathologies in our arrangement were intense suppurative lymphadenitis and necrotic lymphadenitis which were found in 12% and 10% aspirates separately.

CONCLUSION:

FNAC is a helpful, moderately non - horrendous and fast technique for diagnosing the hidden pathology and is significant demonstrative device in the assessment of superficial lymph nodes.

REFERENCES:

1. Malaker D, Jajoo ILN, Swarup K, Gupta OP, Jain AP, Poflee VW. A clinical evaluation of fine Needle aspiration cytology in the diagnosis of lymphadenopathy. *Ind J Tub.* 1991;17-9.
2. Shah PC, Patel CB, Bhagat V, Modi H. Evaluation of peripheral lymphadenopathy by fine needle aspiration cytology; a one year study at a tertiary centre. *Int J Res Med Sci.* 2016;4(1):120-5.
3. Wilkinson AR, Mahore SD, Maimoon SA. FNAC in the diagnosis of lymph node malignancies. A simple and sensitive tool. *Indian J Med Pediatr Oncol.* 2012;33(1):21-4.
4. Kumar N, Gupta BB, Sharma B, Kaushal M, Rewari BB, Sundriyal D. Role of fine needle aspiration cytology in human immunodeficiency virus - associated lymphadenopathy: a cross – sectional study from Northern India. *Hong Kong Med J.* 2015;21(1):39-44
5. Shrivastav A, Shah HA, Agarwal NM, Santwani PM, Srivastava G. Evaluation of peripheral lymphadenopathy by fine needle aspiration cytology. A three year study at tertiary center. *Journal of Dr NTR University of Health Sciences.* 2014;3(2):86-91.
6. Mohanty R, Wilkinson A. Utility of fine needle aspiration cytology of lymph nodes. *IOSR J Dent Med Sci.* 2013;8(5):13-8.
7. Pandey P, Dixit A, Mahajan NC. The diagnostic value of FNAC in assessment of superficial palpable lymph nodes: a study of 395 cases. *Al Ameen J Med Sci.* 2013;6(4):320-7
8. Ghartimagar D, Ghosh A, Ranabhat S, Shrestha MK, Narasimhan R, Talwar OP. Utility of fine needle aspiration cytology in metastatic lymph nodes. *J Pathol Nepal.* 2011;1:92-5