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Letter to the Editor

Characteristics and Pattern of Tuberculosis among Patients Presented at One of Tertiary Care Hospital Peshawar, Pakistan

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Dear Editor-in-Chief

Pulmonary tuberculosis is an air born infection disease caused by *Mycobacterium tuberculosis* and is a major cause of morbidity and mortality particularly in developing countries (1-3).There are 33 million cases of TB worldwide, 3 million annual death and 8 million persons developed active TB every year ¾ of which concentrated of productive age group (4). If TB is detected early and fully treated, people with the disease quickly become non-infectious and eventually cured. However multi-drug resistance TB, HIV associated TB and weak health system are the major challenges. WHO is making an effort to dramatically reduce the broken of TB and to half TB death and prevalence by 2015 through its stop TB strategy and supporting the global plan to stop TB (5). The promotion diagnosis of TB is essential for community public health infection control measure as well as for ensuring the appropriate therapy for infected patient unfortunately Acid Fast bacilli are found in the sputum in a limited numbers of patient with active Pul-TB (6). Therefore the imagine diagnosis would provide an appropriate therapy for infected patient before the definitive diagnosis by the bacteriology.

A descriptive study was carried out on patients attending the Pulmonology Department of Lady Reading Hospital Peshawar, Pakistan from 13 January to 15 April 2013. The study was approved by Ethical Committee of Jinnah Medical College, reregistered Pakistan Medical & Dental Council. Patient diagnosed as case of pulmonary tuberculosis of both genders and above age of 13 year was included in the study. Patient suffering from extra pulmonary tuberculosis, treatment failure relapse drug resistance Tuberculosis and HIV responsible present were excluded from the study. All the subjects suffering from symptoms and sign suggestive of pulmonary tuberculosis were subject for X-ray chest PA view and other view and other related investigation for the diagnosis of tuberculosis. The tuberculosis lesion was classified according to the site of lesion (Unilateral or Bilateral). The study was consisted of 100 patients (Male 54 and female 46).

The study showed that that unilateral involvement of the lungs was more common among the patient than the left involvement. Out of 54 male patients there were 34 patients with right unilateral involvement and 20 were left involvement. In female out of 46 patients 40 patients were right side involvement than 6 patients with left side. So involvement of lungs is more common in right side. Out of 54 patients 34 were unilateral and 20 bilateral. Out of 46 female patients 26 were unilateral and 20 were bilateral. Some tests were positive in all of the patients e.g. ESR, Urea, ALT these tests were positive approximately in all patient other than these tests i.e. ALP, total bilirubin level was increase in 20% of patients. The other deficiency

of HB level was seen in these patients. Approximately 80% of the patients had low level of Hb in full blood count and total leukocyte count level was raised in 24 patients out of 100 patients in both sexes. Neutrophil level was increased in all patients and eosinophil level was raised in 60 patients out of 100 patients.

The right lung was more frequently affected as compare to the left lung whereas the most of the patients characterized by low hemoglobin level and associated feature. However the result could not be generalized, which necessitate further research to see the reasons for right lung being affected.

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Reference

1. Cesgielski JP, Chin DP, Espinal MA (2002).The global tuberculosis situation: progress and problem in 20th century prospects for the 21 century. *Infect Dis Chin North Am,* 16:1-5.
2. Corbet EL, Watt CJ, Walker NL (2003). Global trends and interactions with the HIV epidemic. *Arch intern Med*, 163:1009-1021.
3. Tufariello JM, Cham J, Flynn JL (2003). Medium of host and bacillus that contribute to persistent infection. *Lucent Infect Dis*, 3:578-590.
4. WHO An Expected Dots frame works for effective Tuberculosis control. WHO / CDS / TB / 2002, 297.
5. WHO programs and projects. Tuberculosis. The stop T.B strategy. www.who.int/tb/strategy/en/. WHO website
6. Lee KS, IM JG, (1995). Diagnosis in adult with tuberculosis of the chest characteristic finding and role in management. *AJR,* 164:136:-1367.