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Review Article

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WHEN AN INDIAN LADY PHYSICIAN SUFFERS FROM TUBERCULOSIS FOR THE THIRD TIME

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ABSTRACT
Tuberculosis infection is common in India. The risk is more in health care workers. It is associated with social stigma. Recurrent episodes of tuberculosis are known. But; it is rarely seen more than twice. This is a case of physical and psychological issues faced by an Indian lady physician who suffered from tuberculosis for the third time in her life.

KEYWORDS: Tuberculosis, third time, lady.

INTRODUCTION

India accounts for the fourth global burden of tuberculosis (TB).[1] The risk is even more in health care workers.[2] Because of poor knowledge, attitude and wrong beliefs, TB is associated with social stigma.[3] TB infection more than once is common. But; it is rarely seen more than twice. This is a case of an Indian lady physician who suffered from TB for the third time in her life and the psychological issues associated with same.

Case

Twenty year old thin and skinny final MBBS student was evaluated for pyrexia of unknown origin since one month. As the focus of infection was not found and fever was not responding to higher antibiotics, chest radiograph was done. It suggested cavitatory lesion in the right apical lung parenchyma. The sputum examination for acid fast bacilli (AFB) was negative. She was started on anti-Kochs therapy (AKT) with AKT-4 kit (Isoniazid, Rifampicin, Ethambutol and Pyrazinamde for two months, Isoniazid and Rifampicin for next four months). As the fever responded to AKT, it was continued for six months. This was the first episode in year 2000.

Four years later, she again presented with fever not responding to routine antibiotic therapy. Chest radiograph was done and showed right sided moderate pleural effusion. Pleural fluid was negative for AFB. With the diagnosis of Tuberculor right pleural effusion, AKT was started. Injection Streptomycin was added. Because of sever ear pain; streptomycin was stopped after five days. AKT-4 course was continued for further six months. At end of six months therapy, repeat chest radiograph was normal and she was declared cured of disease. This was the second episode in year 2004.

Twelve years after completing the second course of AKT, she presented with fever on and off for around two weeks not responding to routine antibiotic therapy. In third week she presented with pleuritic chest pain. Chest radiograph was done and reported as normal. Ultrasonography examination of thorax was advised because of persistent pleuritic chest pain. It showed right sided pleural effusion. Both therapeutic and diagnostic pleurocentesis was done. Pleural fluid was negative for AFB and biochemistry was suggestive of infective etiology. With the diagnosis of Tuberculor right pleural effusion she was started on AKT with Tab Pyrazinamaide 750 mg twice daily for two months and Ethambutol 800mg OD, Isoniazid 300mg OD and Rifampicine 600mg OD for nine months. After completion of intensive phase therapy chest radiograph and ultrasound thorax was normal. Computed tomography done at the end of AKT treatment showed no active lesion. Patient was symptom free. This was the third episode in 2017.

In retrospect, she gave history of irregular eating and sleep pattern during first two episodes of disease while psychological stress and poor eating habits at the third time. The first episode was not disclosed openly because of fear of problems in future social life. Though she received good psychological support from her family and friends, she experienced wired behavior even from few medical colleagues. Now, at thirteen months after completing treatment she is doing well.

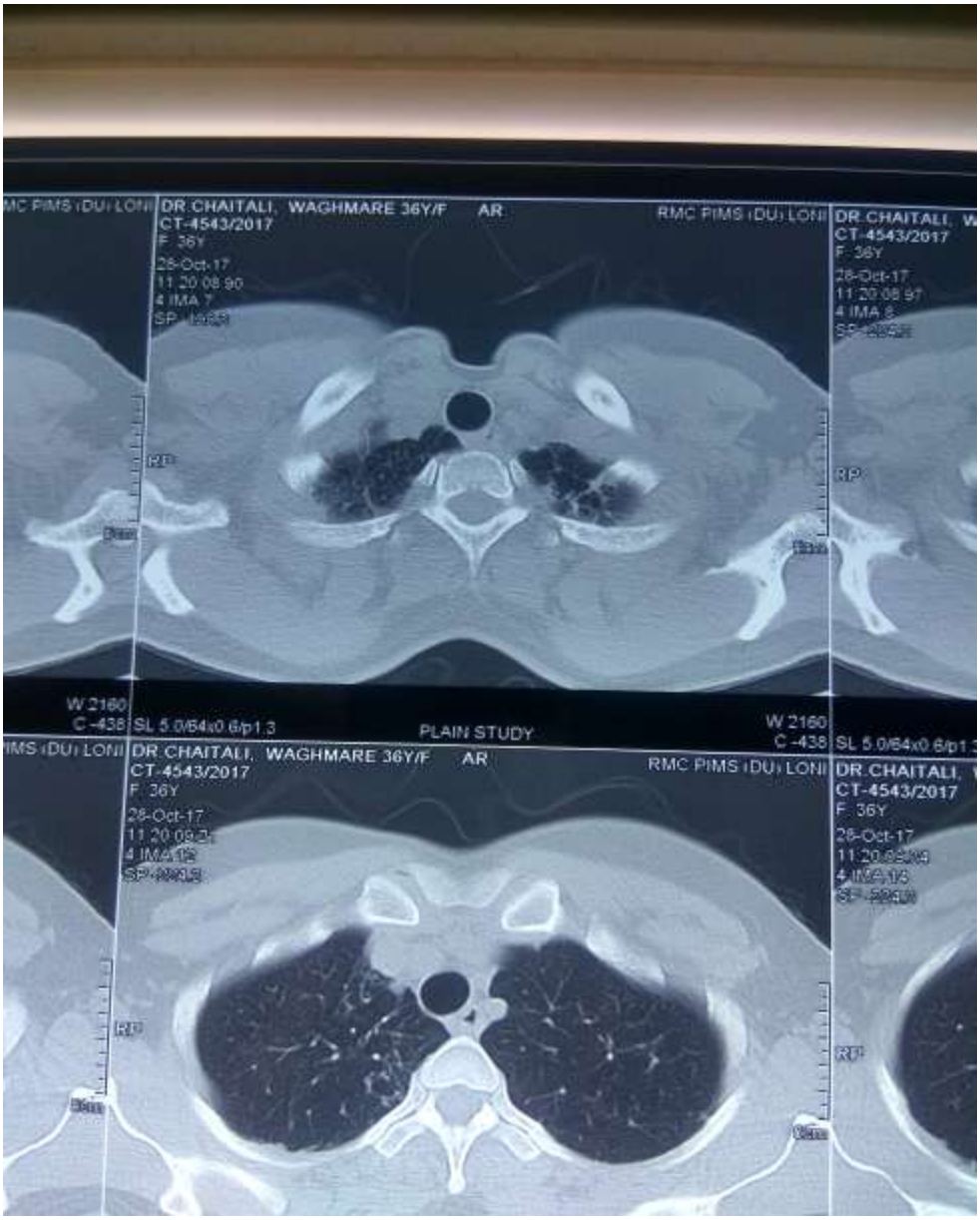

Figure 1: HRCT after completion of third course AKT.

DISCUSSION

About 40% of Indian population is infected with TB bacteria and majority has latent TB than TB disease.[1] The risk is even more in health care workers, especially medicine and radiology residents.[2] This patient might have inhaled the organism during her clinical postings in Medicine. Some peoples are more susceptible to TB than the others. Mathew et al had studied the risk factors for tuberculosis in health care workers. They found low body mass index and frequent contact with TB patients are significantly associated with high risk of TB.[4] Although BCG vaccination is given to all Indians as a part of National Vaccination Program, it does not appear to prevent primary infection with mycobacterium tuberculosis. There is no evidence that repeated BGC vaccination confers additional protection.[5] But; Aronson et al had shown that BCG is protective for 50-60 years.[6]

TB is the most common cause of pleural effusion in areas where TB is endemic. It can be because of reactivation of disease or primary infection. Rate of re-infection with TB is around four times high within five years.[7] Relapse is difficult to treat because of some kind of mutation of original strain of bacteria. This patient must have re-infection rather than reactivation of previous disease as it responded to standard AKT. Literature review showed only one case of tuberculosis occurring more than twice. It was a case of Tibetan Nurse whose second episode was multi-drug resistant.[8] In our case, infection was susceptible to standard AKT for all three times.

Along with physical disease TB patient suffers from psychological stress. They need to be strong enough to cope up with treatment toxicities and social stigma. In India, patients with TB often experience rejection and social isolation. The stigma has taken a greater tool on

women than men. Because of fear of being ostracized, person also hides symptoms especially women.[3]

The important thing in this case is, for all the three times mycobacterium tuberculosis organism was not detected and for all three times she responded to standard AKT. The health care workers in India need to take special precautions while with patients.

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Conflict of interest: Author herself is the patient described in this case.

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REFERENCES

1. Tuberculosis disease burden in India. In TB India 2017. Revised National Tuberculosis Control Program, Annual Status Report, Central TB Division by Government of India. Page 9. https://tbcindia.gov.in assessed on 4th June 2018.
2. Basavraj A, Chandnwale A, Patil A, Kadam D, Joshi S, Gupte N, et al. Tuberculosis risk among medical trainees, Pune, India. Emerg Infect Dis., 2016; 22(3): 541-543.
3. Mathew AS, Takalkar AM. Living with tuberculosis: The myths and the stigma from Indian perspective. Clin Infect Dis., 2007; 45(9): 1247.
4. Mathew A, David T, Thomas K, Kuruvilla PJ, Balaji V, Jesudoson MV, Samuel P. Risk for tuberculosis among health care workers in South India. J Clin Epidemiol, 2013; 66(1): 67-74.
5. Unknown author. WHO news and activities. WHO statement on BCG revaccination for prevention of tuberculosis. Bulletin of WHO, 1995; 73(6): 805-806.
6. Aronson NE, Santosham M, Comstock GW, Howard RS, Moulton LH, Rhoades ER, Harrison LH. Long term efficacy of BCG vaccine in American Indians and Alaska natives: A 60 years follow up study. JAMA, 2004; 291(7): 2086-2091.
7. Verver S, Warren RM, Beyers N, Richardson M, Supy GD, Borgdorff MW. Rate of reinfection tuberculosis after successful treatment is higher than rate of new tuberculosis. Am Jr Respir Critl Care Med., 2005; 171(12): 1430-1435.
8. Pfyffer GE, Strassle A, Brandli O, Shang H. Three episodes of tuberculosis –To multidrug resistance to back to susceptibility. Clin Infect Dis., 1998; 26: 219-220.