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Research Article

TEICOPLANIN INDUCED-DRUG FEVER IN A PATIENT OF COMPLICATED DENGUE FEVER

Danish Memon[1] and Dattatraya Patil[2]

[1]Consultant Physician, Department of Medicine, Noble Hospital, Hadapsar, Pune, Maharashtra
[2]Resident in General Medicine, Noble Hospital, Hadapsar, Pune, Maharashtra

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ABSTRACT

We present a case of 40 years old female, who was referred to our hospital with history of acute febrile illness with seizures, had septic shock, leukemoid reaction who was investigated and found to have dengue.

Her clinical presentation was attributed to severe secondary bacterial infection. With this scenario she was empirically started on Meropenem, Teicoplanin and Doxycyclin.

General condition started recovering, she became normotensive, there were no further episodes of seizure, but she continued to have persistent fever.

INTRODUCTION

Drug fever is a common condition that is frequently misdiagnosed. It is a febrile response that coincides temporarily with the administration of a drug and disappears after discontinuation of the offending agent. Drug level is usually suspected when no other cause for the fever can be elucidated, sometimes after antimicrobial therapy has already been started.

CASE REPORT

40 years old female patient presented with the history of seizures associated with loss of consciousness which lasted for 10-20 min. Prior to these symptoms she had history of intermittent fever and flu like symptoms which was going on for about 7-10 days. She was being treated for the same by local doctor on OPD basis. There was no history of breathlessness, hemoptysis, chest pain, palpitations. No history of any neurological disease in the past. No any major illness like Diabetes, Hypertension, Pulmonary Tuberculosis. No any history high risk behavior. She was being treated outside with oral medications for these symptoms.

In our hospital at the time of examination she was found to have hypotension with blood pressure of 70/40 mmHg and fever of 100°F. She was conscious oriented responding well to verbal commands, neurological evaluation was also normal. Other systemic examinations were also essentially normal. Investigations revealed a total leukocyte count of 42600/cumm with a high serum Procalcitonin levels of 6. Dengue IgM was positive. ECG showed ST depression in all the leads with significant trop-T and CKMB levels. Ultra-Sonography of abdomen and pelvis showed enlarged liver. Thus overall picture was suggestive of Complicated Dengue with Myocarditis and Encephalitis along with Secondary Bacterial infection and septic shock.

Other investigations like widal, rapid malarial parasite, brucella, HIV were negative. Arterial blood gases analysis and chest x-ray were normal. Hb was 11.8mg and platelets 3.7 Lacs/cumm, Total count 42600/cumm, urine routine was normal, serum creatinine 1.13. MRI brain and EEG were done as a part of work up for seizures which were normal. With this clinical presentation and investigations she was empirically started on Parenteral antibiotics (Meropenem, Teicoplanin, Doxycycline) and antimalarials (Artesunate). She was also put on ionotropic support for shock. With this treatment, her general condition began to improve. Her BP stabilized. Total leukocyte count which was attributed to leukemoid reaction decreased to 8100/ cumm, procalcitonin levels decreased. All these feature suggested recovering sepsis, but she continued to have persistent high grade fever. Meanwhile she underwent further set of investigations for fever. 2D Echo of heart both transthoracic and transoesophageal were found to be normal, did not reveal any features of infective endocarditis. HRCT of chest showed few enlarged axillary lymphnodes, which were insignificant. During this period Meropenem, Teicoplanin were stopped and combination of ceftriaxone + sulbactam + disodium edetate (EDTA) was added along with clindamycin.
Even after 72 hours of the changed antibiotics, there was no effect whatsoever on the fever spikes.

*Corresponding author: **Danish Memon***
Consultant Physician, Department of Medicine, Noble Hospital, Hadapsar, Pune, Maharashtra

Finally patient was planned for a PET scan, bone marrow studies and liver biopsy. Meanwhile all the antibiotics were stopped to observe and analyze the severity and pattern of fever. But after 48-72 hours of stopping Teicoplanin fever started subsiding. She was observed for 2 more days, but was completely afebrile and finally, sent home without any antibiotics.

DISCUSSION

Drug fever is a common condition that is frequently misdiagnosed. It is a febrile response that coincides temporally with the administration of a drug and disappears after discontinuation of the offending agent (Patel and Gallagher, 2010). Although this patient initially had all the features of sepsis and sever dengue, she continued to have high grade fever. The clinical signs, hemodynamic stability (except for fever) the reduced levels of serum procalcitonin, the recovered leukemoid reaction, all favored recovering infection.

All other investigations as a part of workup for fever of unknown origins were negative and unfruitful. So eliminating almost all the probabilities, no other cause for fever was elucidated (Patel and Gallagher, 2010). Patient was planned for PET scan, Bone Marrow biopsy, liver biopsy. As she had already received more than seven days of higher antibiotics, it was decided to stop further use of antibiotics.

In cases of drug fever, it is observed that, in non-sensitised individuals receiving the drug for first time, the onset of fever in highly valuable and differs amongst drug classes, but most commonly appears after 7-10 day of drug administration (Patel and Gallagher, 2010; Lipsky and Hirschmann, 1981; Tabor, 1986). The patient gradually became afebrile within 48 hours of stopping all the antibiotics, even the use of antipyretics was withheld. Fever did not recur for further 48 hours (Lipsky and Hirschmann, 1981). So a strong possibility of drug fever was considered in our case. On retrospective analysis it was observed that although patient received multiple higher antibiotics, Teicoplanin could have been the main culprit in this case, to have caused the possible drug fever. Teicoplanin appears to be a notorious drug, the half life of elimination of Teicoplanin in the elimination phase is 108 hours, which is long (Ochi *et al*., 2011). Although in our case plasma concentration of Teicoplanin was not measured.

References

Patel, R.A. and Gallagher, J.C. (2010): *Drug fever. Pharmacotherapy*, 30(1): 57-69.

Lipsky, B.A. and Hirschmann, J.V. (1981): *Drug fever. JAMA*, 245(8): 851-854.

Tabor, P.A. (1986): Drug-induced fever. *Drug Intell. Clin. Pharm.*, 20(6): 413-420.

Ochi, H., Wada, H., Okada, H., Kohara, N., Fujita, T, Toda, K., *et al*., (2011): The persistence of drug-induced fever by teicoplanin-a case report. *Int. J. clin. Pharmacol. Ther*., 49(5): 339-343.

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