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LETTER TO THE EDITOR

Ciprofloxacin-induced severe thrombocytopenia

To the Editor,

Thrombocytopenia may be induced by numerous factors, whereas ciprofloxacin-induced severe thrombocytopenia rarely occurs [1,2]. Starr et al. [3] reported that a 72-year-old patient developed thrombocytopenia after ciprofloxacin treatment for a urinary tract infection. Tuccori et al. [4] observed abdominal pain, hepatitis, thrombocytopenia, and hemolysis in a 30-year-old patient after ciprofloxacin treatment for urinary tract infection. In addition to this, Chaudhry et al. [5] observed that thrombocytopenia occurred as a result of ciprofloxacin treatment for urinary tract infection.

A 61-year-old unconscious patient who was treated at home for chronic diarrhea for 5 years was admitted to the emergency room. The patient was given ciprofloxacin 500 mg, twice daily after she did not respond to antipyretic treatment. She was also diagnosed with Parkinson's disease and was treated with levodopa and baclofen on regular basis. She was brought to the emergency room because her health in general was deteriorating. She was experiencing diarrhea, nausea and vomiting, hypotension, tachycardia, tachypnea, and fever. When she was diagnosed with hypoxemia, she was intubated and taken to the intensive care unit for mechanical ventilation. Pan-cultures were obtained and eventually the patient was placed on intravenous piperacillin-tazobactam 4.5 g. Her laboratory work-up revealed a white blood cell count of 23,000 per mm^3, thrombocyte count of 119,000 per mm^3, and C-reactive protein level of 116 mg/L. Physical examination revealed decreased lung sounds and crepitant rales on both lungs.

The patient's thrombocyte count at 24 hours was 16,000 per mm^3. At that time, antiaggregant treatment was stopped and 12 units of thrombocyte suspension were given to the patient. The thrombocyte count at 48 hours was 96,000 per mm^3. A purpuric skin rash on the extremities and petechiae were noticed at that time. The levodopa and baclofen treatments were stopped due to their potential thrombocytopenic effect. The patient's blood chemistry, specifically the liver function test, was normal. The complete blood count at 72 hours showed a thrombocyte level of 36,000 per mm^3 and 6 units of thrombocyte solution were given to the patient.

On the 5^{th} day, levodopa treatment was restarted. The thrombocyte count was 131,000 per mm^3 on the 8^{th} day and on the following days the count was within normal limits. Piperacillin-tazobactam was given for 14 days. Our thinking was that was that the ciprofloxacin treatment given at home was the cause of the patient's thrombocytopenia. Later on the patient had percutaneous tracheostomy and percutaneous endoscopic gastrostomy and was discharged home on 30^{th} day of her hospital stay.

The sepsis, disseminated intravascular coagulation, heparin, levodopa, and ciprofloxacin were considered to have caused the thrombocytopenia.

In conclusion, our patient developed thrombocytopenia after receiving ciprofloxacin for 5 days as a treatment for fever and diarrhea. After our experience, we recommend that ciprofloxacin be considered one of the causative agents while evaluating the patient for thrombocyto penia.

Acknowledgments

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