Hydroxyzine induced pancytopenia and petechial rashes: a rare complication

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TO THE EDITOR

Hydroxyzine difenilmetan and pipеразине group are first generation antihistaminic drugs. Hydroxyzine is widely used in all around the world to treat pruritis caused by histamine effect and such allergic cases like chronic urticaria, atopic and contact dermatitis [1]. Different side effects of hydroxyzine such as deep sleep, coordination defect, vertigo, hypotension, tinnitus, headache, constipation have been declared in literature [2]. In our literature search pancytopenia caused by hydroxyzine was not seen. In this case report, a twenty-one year-old woman, who had pruritis complainment at joints and developed pancytopenia with widespread petechial rashes in the body after using two tablets of hydroxyzine, is going to be discussed.

A twenty-one-year-old woman applied to emergency service with the complainment of widespread petechial rashes. In her story, she was recommended hydroxyzine when she applied to dermatology polyclinic three days ago with pruritis complainment in the body. The patient, not having any disease or complainment for a long time, started to have common millimetric petechial rashes in her body after taking the second dose of hydroxyzine tablet. The phisical examination in patients first application was common petechial rashes in all body and bleeding points in the gum. White blood cell (WBC): 2,79 x10⁹/μl, neutrophile:1,5 10³ /μl, hemoglobin:8,6 g/dl, platelet count: 2x10³ /μl was found in laboratory tests. In peripheric smear: platelet count was consentient, anisopoikilositosis was seen but atypic cell was not found. In the examination of anemic panel, vitamin B 12, ferritin, folate, homocysteine were normal. The other tests intened for pancytopenia were normal. In abdominal ultrasonography hepatosplenomegaly, periferik or intraabdominal lenfadenomegaly was not detected. Bone marrow and imprint examination were normal.

In this patient, according to these findings pancytopenia dependent to hydroxyzine was though primarily. Platelet count was 2x10³ /μl in her first application. We gave 18 units random platelet transfusion and 5 units apheresis platelet transfusion but her platelet count was not increased. Then we started 1 mg/kg /day lv methylprednisolone. At the end of lv methylprednisolone treatment her blood count was normal.

Hydroxyzine is frequently used both in our country and worldwide [3] because of its extensive usage indication. Different side effects have been declared both in medicine prospectus and in literature [4]. But, there is no evidence about the fact that pancytopenia is seen dependent on hydroxyzine. However, in a source in electronic form, of the 10.134 patients using hydroxyzine in the side effect study, only 150 patients (%1.48) are mentioned to have pancytopenia [5]. It is mentioned that among a major part of these cases, there are some diseases (like multiple myeloma, romatoid artritis and HIV infection) that will cause pancytopenia [5]. The fact that diagnosis and symptoms occured after using only 2 tablets of hydroxyzine, that she is not using any other medicine or drug and that there is no finding to explain pancytopenia in phisical examination and laboratory findings, made us think that etiyology can be dependent on this medicine. In addition, the fact that she had no rash before using medicine and that hemogram outputs taken because of itching complaintments 3 days ago are in normal limits enforced the possibility of pancytopenia. As known, there is no specific treatment of medicine dependent pancytopenia. It is very important to stop the medicine that the patient used and to warn not to use it again.

Finally, it should be in mind that hydroxyzine, widely used in daily practise, can cause pancytopenia, even serious pancytopenia. In addition, in pancytopenia whose reason cannot be found, hydroxyzine which patients regard as a simple medicine and don’t say, and similar spiers must be necessarily interrogated in detail.

REFERENCES