Letter to the Editor

Varicella zoster virus-related pancytopenia

We read the article entitled “Don’t forget how severe varicella can be—complications of varicella in children in a defined Polish population” by Gowin et al.1 with interest. We agree that the secondary infection of varicella-induced rash is the most common complication, however once in a while we do see uncommon complications of this relatively common disease in tropical countries. The hematologic complications due to varicella are often underestimated and we would like to describe one such case seen by us recently.

A 19-year-old unvaccinated woman, with no prior illness, was referred to our hospital with febrile neutropenia. She had previously presented to a private clinic with fever of 1-week duration and pancytopenia. A complete blood count at presentation to our hospital revealed hemoglobin of 8.6 g/dl, white blood cells (WBC) of 0.9 × 10⁹/l, and platelets of 14 × 10⁹/l. Physical examination findings were striking for the presence of a pleomorphic rash. It was present predominantly over the trunk and upper limbs and showed hemorrhagic crusting. The rest of the physical examination was unremarkable. A Tzanck smear from this rash showed the presence of multinucleated giant cells.

With a clinical diagnosis of varicella, she was started on oral acyclovir 800 mg five times a day. The fever subsided in 24 h. From the third day of therapy, her hemoglobin and WBC and platelet counts started to improve. After a week of acyclovir therapy, the vesicular rash had crusted completely. Her complete blood count at discharge showed a hemoglobin of 9.3 g/dl, WBC count of 7.2 × 10⁹/l, and platelet count of 180 × 10⁹/l.

Thrombocytopenia due to viral illness is a well known phenomenon.2 However, a decrease in all cell lines (pancytopenia) is a less common presentation. There are a few reports of pancytopenia associated with varicella zoster virus infection.3–5 The mechanism for the pancytopenia is unclear. Possible hypotheses proposed are the direct effects of the virus on bone marrow and the immunological response to the virus.4

Early recognition of the disease and awareness of such uncommon presentations of varicella are important. This will avoid the erroneous labeling of a common and easily treatable disease as a more sinister hematologic disorder.

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References


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