

Letter to the editor about Maculopapular Rash after Penicillin Injection in a Patient with Confirmed Infectious Mononucleosis

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Dear Editor

We read your journals and other journals that have reported maculopapular rash developed in patients with Infectious Mononucleosis (IM) after taking antibiotics, such as Ampicillin, Amoxicillin, Minocycline, Azithromycin and Clindamycin [1,2]. But we want to explain another antibiotic which is Penicillin that caused maculopapular rash in an 18-year-old female with confirmed infectious mononucleosis. To our knowledge, there is no reported case in the literature about penicillin induced rash in infectious

mononucleosis. The skin rashes developed about a week after the administration of antibiotics and usually have improved up to three months later [3]. Infectious mononucleosis is caused by Epstein-Barr Virus & kissing is the main way of transmitting the primary EBV infection. For this reason it is sometimes called "kissing disease" [4]. The laboratory tests to diagnose this disease are IgM, IgG, PCR (Polymease Chain Reaction) and widely by Monospot Test [5].

The patient that we were talking about developed rashes two days after she had received penicillin. At first we thought that the rashes can be the result of drug sensitivity. But after studying the lab results and clinical symptoms Infectious mononucleosis was confirmed. We used the Naranjo ADR (Adverse Drug Reaction) possible score [Table/Fig-1].

The mechanism of rash appearance in patients with infectious mononucleosis is not clearly understood. It seems that in some cases, rash development is a non-immunological response. One theory is that, the skin rash may be due to immune response as a result of the EBV presence or because of changes in pharmaceutical metabolism caused by the disease [2]. It is believed that, the immune response due to presence of the virus, is the main cause of skin rash during concurrent treatment with antibiotics. Finally, it is recommended penicillin skin test be performed, if penicillin injection is mandatory in future.

Sincerely,

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BCC subtype	Yes	No	Do not know	Score
1. Are there previous conclusive reports on this reaction?	+1	0	0	0
2. Did the adverse event occur after the suspected drug was administered?	+2	-1	0	+2
3. Did the adverse reaction improve when the drug was discontinued or a specific antagonist was administered?	+1	0	0	+1
4. Did the adverse reaction reappear when the drug was readministered?	+2	-1	0	0
5. Are there alternative causes (other than the drug) that could have on their own caused the reaction?	-1	+2	0	-1
6. Did the reaction reappear when a placebo was given?	-1	+1	0	+1
7. Was the drug detected in the blood (or other fluids) in concentrations known to be toxic?	+1	0	0	0
8. Was the reaction more severe when the dose was increased or less severe when the dose was decreased?	+1	0	0	0
9. Did the patient have a similar reaction to the same or similar drugs in any previous exposure?	+1	0	0	0
10. Was the adverse event confirmed by any objective evidence?	+1	0	0	+1
Total				+4

[Table/Fig-1]: The Naranjo adverse drug reaction score

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