Reality of drug-induced erythema multiforme: A French pharmacovigilance study

Sarah Demouche[1], Thomas Bettuzzi[2], Emilie Sbidian[3], Delphine Laugier[4], Marie-Noelle Osmont[5], Saskia Ingen-Housz-Oro[6], and Bénédicte Lebrun-Vignes[7]

[1]Hôpital Henri Mondor
[2]Affiliation not available
[3]Hopital Henri Mondor
[4]Assistance Publique Hopitaux de Marseille
[5]Hôpital Pontchaillou
[6]Henri-Mondor Hospital
[7]Hopitaux Universitaires Pitie Salpetriere-Charles Foix

October 14, 2022

Abstract

Background: Since the 2002 SCAR study, erythema multiforme(EM), a post-infectious disease, has been distinguished from Stevens-Johnson syndrome (SJS), drug-induced. Nevertheless, EM cases are still reported in the French pharmacovigilance database (FPDB). Objectives: To describe EM reported in the FPDB and to compare the characteristics of the reports. Methods: This retrospective observational study selected all EM cases reported in the FPDB over two periods: period 1 (P1, 2008-2009) and period 2 (P2, 2018-2019). Inclusion criteria were 1) a diagnosis of clinically typical EM and/or one validated by a dermatologist; 2) a reported date of onset of the reaction; and 3) a precise chronology of drug exposure. Cases were classified confirmed EM (typical acral target lesions and/or validation by a dermatologist) and possible EM (not-otherwise-specified target lesions, isolated mucosal involvement, doubtful with SJS). We concluded possible drug-induced EM when EM was confirmed, with onset ranging from 5 to 28 days without an alternative cause. Results: Among 182 selected reports, 140(77%) were analyzed. Of these, 67(48%) presented a more likely alternative diagnosis than EM. Of the 73 reports of EM cases finally included (P1, n=41; P2, n=32), 36(49%) had a probable non-drug cause and 28(38%) were associated with only drugs with an onset time [?]4 days and/or [?] 29 days. Possible drug-induced EM was retained in 9 cases (6% of evaluable reports). Conclusions: This study suggests that possible drug-induced EM is rare. Many reports describe “polymorphic” rashes inappropriately concluded as EM or post-infectious EM with unsuitable drug accountability subject to protopathic bias.

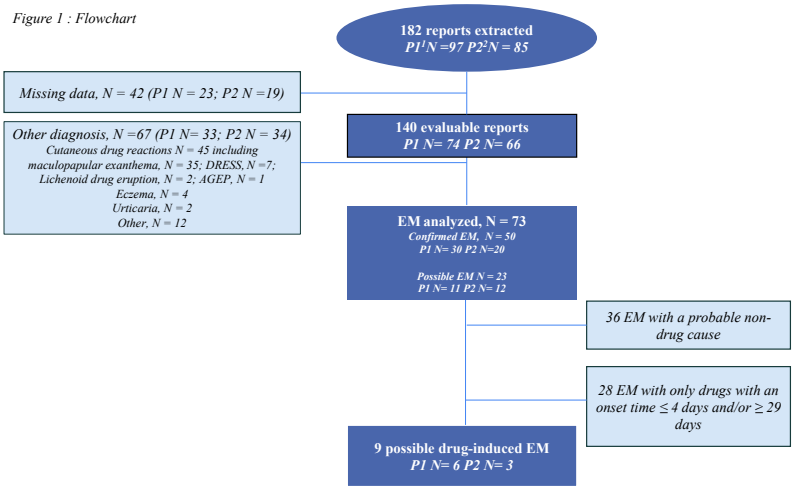
Hosted file

`EM BJCP text.docx` available at https://authorea.com/users/514859/articles/590427-reality-of-drug-induced-erythema-multiforme-a-french-pharmacovigilance-study

Hosted file

`EM BCJP table.docx` available at https://authorea.com/users/514859/articles/590427-reality-of-drug-induced-erythema-multiforme-a-french-pharmacovigilance-study

Figure 1 : Flowchart



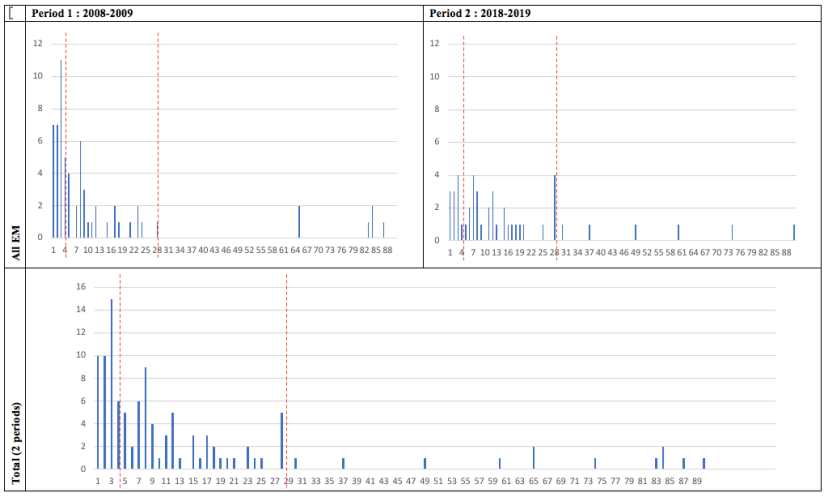


Figure 3 : Groups of suspect drugs for each group and period