

SFDA SAFETY SIGNAL

“A signal is defined by the SFDA as reported information on a possible causal relationship between an adverse event and a drug, the relationship being unknown or incompletely documented previously. Usually more than a single report is required to generate a signal, depending upon the seriousness of the event and the quality of the information. A signal is a hypothesis together with data and arguments and it is important to note that a signal is not only uncertain but also preliminary in nature”

7-9-2020

Saudi Food and Drug Authority (SFDA) – Safety Signal of Molluscum Contagiosum Associated with the Use of Fingolimod products

*The Saudi Food and Drug Authority (SFDA) recommends all health care professionals to be aware of the safety signal of **Molluscum Contagiosum** associated with the use of **Fingolimod**. The signal has been originated from local case that has been reported to the National Pharmacovigilance Center (NPC).*

Background: Fingolimod is a sphingosine 1-phosphate receptor modulator indicated to treat Relapsing Remitting Multiple Sclerosis. ^[1, 2] Molluscum Contagiosum (MC) is a self-limiting benign skin disease caused by a poxvirus. It is characterized by small pearly papules with core that may produce a white cheesy material ^[2]

Methodology: on July 16, 2019, the Signal Detection team at Saudi Food and Drug Authority (SFDA) performed a safety review using NPC database, and World Health Organization (VigiBase), along with literature screening to retrieve all related information would be beneficial to assess the causality between Molluscum Contagiosum infections and Fingolimod use.

Results:

Local Cases: The NPC has received one case-report of Fingolimod associated with MC. This case has possible association according to WHO-UMC causality assessment.

Global Cases: The WHO database (VigiBase) searched for all individual case safety reports (ICSRs) reported with Molluscum Contagiosum (Preferred Term) and Fingolimod (Active Ingredient) yielded to 48 ICSRs most of the cases were reported in 2019. Our initial review revealed that 32 cases were not sufficiently documented for proper medical assessment. However the rest cases 16 has been evaluated resulted in one case with positive dechallenge and one case with negative dechallenge, after applying the WHO causality assessment, the sixteen cases showed possible association. Moreover, Fingolimod was the most reported medication with the adverse reaction term Molluscum Contagiosum in WHO database when compared with all other medications in VigiBase. ^[4]

Literature: Only one case report found reported a possible association between the use of Fingolimod and the risk of MC. Valeria et al. reported 18-year old Caucasian man with history of relapsing remitting multiple sclerosis who developed a MC virus infection shortly after started on Fingolimod. ^[5]

Datamining: Information Component (IC) developed by WHO Uppsala Monitoring Centre has been used to calculate the reporting ratio between drug and event. Higher value of IC means a strong statistical association between certain medications with the event in comparison to other medications. The combination of Fingolimod and Molluscum Contagiosum has observed more than expected (IC 4.88) when compared with other medications in VigiBase. ^[4]

Biological plausibility: Fingolimod has an immunosuppressive effect and can increase the risk of serious opportunistic infections that include Molluscum Contagiosum viral infection. ^[6]

Conclusion

The weighted cumulative evidences identified from global cases, data mining and published literature are sufficient to support a causal association between Molluscum Contagiosum and Fingolimod. Therefore, health care professionals should be aware of this safety concern and may consider monitoring any signs or symptoms of Molluscum Contagiosum in patients treated with Fingolimod.

Report Adverse Drug Events (ADRs) to the SFDA

The SFDA urges both healthcare professionals and patients to continue reporting adverse drug reactions (ADRs) resulted from using any medications to the SFDA either online, by regular mail or by fax, using the following contact information:

National Pharmacovigilance Center (NPC)
Saudi Food and Drug Authority-Drug sector
4904 northern ring branch rd
Hittin District
Riyadh 13513 – 7148
Kingdom of Saudi Arabia
Toll free number: 19999
Email: NPC.Drug@sfda.gov.sa

References:

- 1- Novartis Pharma AG (2017). Saudi Summary of Product Characteristics (SPC) of fingolimod. (GILENYA)®; (retrieved from: local SFDA database). [Accessed: 7/15/2019]
- 2- Drug bank. (2019) Fingolimod. Retrieved from: <https://www.drugbank.ca/drugs/DB08868> [Accessed 7/16/2019]
- 3- Mayo clinic. (2019). Molluscum contagiosum. Retrieved from: <https://www.mayoclinic.org/diseases-conditions/molluscum-contagiosum/diagnosis-treatment/drc-20375230> [Accessed 7/16/2019]
- 4- Uppsala Monitoring Center (UMC) (2019), Vigilyze database; Available at: <https://vigilyze.who-umc.org/#/> [Accessed 7/16/2019]
- 5- Behle V, Wobser M, Goebeler M, Stoevesandt J (2016) Extensive molluscum contagiosum virus infection in a young adult receiving fingolimod. Mult Scler 22:969–9671.
- 6- Fingolimod (Gilenya ▼): Updated Advice about Risk of Cancers and Serious Infections.” GOV.UK. Accessed August 22, 2019. <https://www.gov.uk/drug-safety-update/fingolimod-gilenya-updated-advice-about-risk-of-cancers-and-serious-infections>