Safety Alert

Rhabdomyolysis with Fusidic Acid and Statin

Issue

Rhabdomyolysis is a rare complication of statin monotherapy.[1] However the risk of rhabdomyolysis is much higher when patients are exposed to the combination of systemic fusidic acid (as fusidic acid hemihydrate/sodium fusidate; hereafter referred to simply as 'fusidic acid') and a statin, compared with exposure to a statin alone.[2]

The concomitant administration of statins and fusidic acid is contraindicated because of this risk of serious and potentially fatal rhabdomyolysis.[3,4,5]

Systemic formulations of fusidic acid include tablets and an oral suspension. There is no evidence of this interaction in relation to the *topical* formulations of fusidic acid (creams, eye drops).[6]

Evidence of Harm

It has been known for some time that there is an increased risk of rhabdomyolysis when systemic fusidic acid is used at the same time as some statins.[3] In recent years, the number and severity of case reports of rhabdomyolysis suspected to be due to an interaction between fusidic acid and a statin have increased.[3] Although the number of cases reported is small, the use of fusidic acid is infrequent, making this a serious safety signal.[3] Symptoms such as myalgia, and signs such as raised creatine kinase level and myoglobinuria, indicating rhabdomyolysis, may occur within days or weeks of commencing fusidic acid in a patient on statin therapy.[1,8] Several cases, some with a fatal outcome, have been reported in Irish hospitals.[1,2,7,8]

The exact mechanism for this interaction is unknown and therefore could occur with any statin.[3]

How to Reduce the Risk

- Systemic fusidic acid should not be given with statins because of a risk of potentially fatal rhabdomyolysis.[3]
- In patients for whom the use of systemic fusidic acid is essential, statin treatment should be temporarily discontinued throughout the duration of fusidic acid treatment and for 7 days after the last dose of systemic fusidic acid.[3] It is important that processes are in place to ensure the statin is restarted.
- Where a patient has acute coronary syndrome or a recent cardiac event, where temporarily stopping a statin is not desirable, discuss case with a Clinical Microbiologist who may be able to recommend an alternative antibiotic and with Cardiology regarding statin management.
- Patients should be clearly advised to seek medical advice immediately if they experience any symptoms of muscle weakness, pain, or tenderness during the period of treatment with a statin regardless of whether or not an interacting medication has been co-administered with the statin.[3,9] Symptoms such as myalgia, and signs such as raised creatine kinase level and myoglobinuria, indicating rhabdomyolysis, may occur within days or weeks of commencing fusidic acid in a patient on statin therapy.[1,8]
- Consider adding a pop-up alert for systemic fusidic acid to pharmacy dispensing systems to advise pharmacists to check statins are not prescribed concomitantly.
- Ensure healthcare staff are aware of the interaction by updating local documentation, e.g. local Prescriber's Guide and circulating this alert in electronic/written form.

References

1. Frohlich S, Ryan T, Fagan C. Statin therapy associated with fatal rhabdomyolysis. JICS. 2011;12(1):40-42.
2. Kearney S, Carr AS, McConville J, McCarron MO. Rhabdomyolysis after co-prescription of statin and fusidic acid. *BMJ* 2012;345:e6562 doi:10.1136/bmj.e6562.
3. Systemic fusidic acid and interaction with statins: risk of rhabdomyolysis. MHRA Drug Safety Update, Vol 5, Issue 2, Sept 2011. Archived at: http://www.webcitation.org/6lqCc4SYX , Nov 7th, 2016.
4. SPC for Fucidin® suspension. https://www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PA0046-004-010_10092014091057.pdf
5. SPC for Fucidin® tablets. https://www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PA0046-004-014_10092014091049.pdf
6. Systemic fusidic acid and interaction with statins -reminder of risk of rhabdomyolysis. HPRA MIMS Article August 2015. https://www.hpra.ie/docs/default-source/3rd-party-documents/mims-articles/hpra-article_aug-2015_statins-fusidic-acid.pdf?sfvrsn=0
7. IMB Statement on Atorvastatin and Fusidic Acid. Human Medicines Advisory 08/08/08. Archived at: http://www.webcitation.org/6lqCtYGUR , Nov 7th, 2016.
8. Magee CN, Medani SA, Leavey SF, Conlon PJ, Clarkson MR. Severe rhabdomyolysis as a consequence of the interaction of fusidic acid and atorvastatin. Am J Kidney Dis. 2010 Nov;56(5):e11-5. doi: 10.1053/j.ajkd.2010.07.011
9. SPC for Lipitor® tablets. https://www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PPA0465-075-001_23022016130223.pdf

Prepared and updated by: Eileen Relihan, Medication Safety Facilitator, St James's Hospital, Dublin 8 on behalf of the IMSN