



Cystic Fibrosis Research News

Title:

Eruptive melanocytic naevi following initiation of elexacaftor/ivacaftor/tezacaftor for cystic fibrosis

Lay Title:

Eruption of brown moles following Trikafta/Kaftrio treatment for cystic fibrosis

Authors:

Michael Atkinson, Oliver Johnson, Niall Wilson, Martin Walshaw, Thomas Simon FitzMaurice

Affiliations:

None

What was your research question?

To describe and suggest why the use of triple-therapy CF drugs (Trikafta/Kaftrio) can lead to an eruption of new brown moles in an otherwise well controlled, cystic fibrosis patient.

Why is this important?

We feel this report is important as it is the first time (to our knowledge) in published research that an eruption of moles has been described in a patient on Trikafta/Kaftrio. Mole eruptions are a rare phenomenon most commonly occurring in patients on immunosuppressant drugs eg. chemotherapy or patients who take tanning injections or triggered by other severe skin diseases. Our patient had none of these factors and we believe that Trikafta/Kaftrio was the triggering factor for her. She had been treated with Symdeko/Symkevi in the past with no issues suggesting that Trikafta/Kaftrio in particular was the trigger.

What did you do?

After the patient reported the eruption of moles during follow up in the cystic fibrosis clinic, we arranged for her to attend the dermatology clinic for full body photography and a skin biopsy as well as further blood tests before ongoing surveillance from the dermatology team.

What did you find?

We found that in just 3 months of Trikafta/Kaftrio treatment our patient went from a baseline of approximately 10 moles to over 200 moles when seen in dermatology clinic. All her blood tests which look for infection were normal, making that an unlikely cause of the new moles. Her skin biopsy showed that the moles were benign with a tiny amount of pre-cancerous





Cystic Fibrosis Research News

change. After the initial mole eruption (up to 3 months treatment) the patient made the decision to continue Trikafta/Kaftrio due its well known CF benefits and she did not carry on developing new moles after this point.

What does this mean and reasons for caution?

We feel that this case highlights that CF drugs like Trikafta/Kaftrio have the potential to trigger mole eruptions in much the same way that has previously been seen with certain immunosuppressant medications. We suggest that this might occur due to the breakdown products of the drug triggering the response in the body. It is important to point out that although we present this case and feel that Trikafta/Kaftrio is the most likely cause of the mole eruption we are unable to prove that with certainty as this is the first reaction of its type to have been researched.

What's next?

For our patient, regular dermatology follow-up reviewing the moles and acting if they increase in number or develop worrying features. For researchers, to look further at the skin effects of CF drugs - particularly mole eruptions, to help the community better understand the true cause and develop future treatment strategies.

Original manuscript citation in PubMed

https://pubmed.ncbi.nlm.nih.gov/35752560/