ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

CUTANEOUS TOXICITY INDUCED BY HIBISCUS TEA IN A PATIENT TREATED WITH ERLOTINIB.

Claire Jacquin Porretaz [1] - B Gerard [2] - C Nardin [1] - Christine Drobacheff-thiebaut [1] - D Blanc [1] - P Jacoulet [3] - Virginie Westeel [3] - F Aubin [1]

University Hospital, Dermatology, Besancon, France [1] - University Hospital, Pharmacology, Besancon, France [2] - University Hospital, Pneumology, Besancon, France [3]

Background: The use of medicinal plants by patients increases up to 30 % after the diagnosis of cancer. One of the most important problems arising from their use is pharmacological interactions with newly developed oral antineoplastic drugs (OAD).

Observation: We report the case of a woman with a non small-cell lung carcinoma treated by erlotinib for five years, who suddenly developed a severe cutaneous adverse effect due to the daily self-administration of a hibiscus tea beverage.

Key message: Tea is the world's second-most-consumed drink and tea made of hibiscus flowers (Hibiscus sabdariffa) is appreciated for its flavor and supposed medicinal qualities. However, hibiscus is less known as an enzymatic inhibitor that may cause clinically significant herb-drug interactions. Previous studies demonstrated that ethanolic extract of Hibiscus sabdariffa caused inhibition of nine different cytochrome P450 (CYP) isoforms in vitro. Erlotinib is a tyrosine kinase receptor inhibitor used in the therapy of advanced non-small cell lung cancer. It is metabolized in the liver largely through CYP isoforms, mainly CYP3A4, CYP1A and CYP1A2. The most known and powerful CYP3A4 inhibitors are anti-mycotic agents, protease inhibitors and antibiotics from macrolide sub-group. There is limited evidence about the interactions of OADs with medicinal plants and food. Grapefruit is one of the most frequent food known for inhibiting CYP3A4 and increasing erlotinib exposure and thus its potential toxicity. Doctors, nurses, pharmacists and patients should be better informed about the interactions with medicinal plants or food and OAD to minimize serious adverse effects.