Skin Reaction on Face Following the Use of Cloves (Syzygium aromaticum)

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Case Report

Clove (Syzygium aromaticum) (Figure 1) is a plant-derived spice that has been traditionally used for centuries as a food preservative and as medicinal plants [1]. The anti-inflammatory, antioxidant and bactericidal activities of clove are mainly due to its major components, which is the eugenol with a concentration rate ranging from (77-95%) [2,3].

Clove is generally safe when taken in foods in lower concentrations [4], however, it is not recommended as a topical application on skin due to insufficiency of safety and toxicity data [5]; it was found to be highly cytotoxic for human fibroblasts and endothelial cells [6] leading to allergic skin reactions (burning, hives, itching, irritation, rash…), ulcer formation and/or tissue necrosis [7].

We report a case of a 39-year-old female patient in good overall health presented with allergic skin reaction on her face following the use of mixture (cloves and water) for an aesthetic purpose. Physical examination showed an allergic skin reaction on her left hemi face (Figure 2), homogeneous, without edema or skin necrosis. The lesion was successfully treated with topical application of betasitosterol daily for ten days.

References