

A case of bullous pemphigoid induced by a sodium-glucose cotransporter 2 inhibitor

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Bullous pemphigoid (BP) is an autoimmune bullous disease characterized by subepidermal blistering [1]. More than 80 different drugs have been associated with the appearance of BP and as new therapies emerge, this number is very likely to increase.

Sodium-glucose co-transporter 2 inhibitor (SGLT2i), a novel class of anti-diabetic agents. Only two cases of BP induced by this molecule were reported in the literature.

An 83-year-old woman presented with an itchy, blistering generalized rash. Four months prior, she had started Dapagliflozine used for type 2 diabetes.

On physical examination, she presented multiple tense blisters and erosions on normally appearing skin on his arms, legs, and trunk with erosion in buccal mucosa. The Nikolsky sign was negative (Fig. 1).

Histopathology showed a subepidermal split with epidermal necrosis, an inflammatory infiltrate, with eosinophils. Direct immunofluorescence showed linear immunoglobulin G and C3 at the basement membrane.

Indirect immunofluorescence was negative for anti-pemphigoid antibodies Ag BP 180 and AgBP230. On the basis of clinical and histopathology findings final diagnosis of SGLT2i-induced bullous pemphigoid was made

Dapagliflozin was discontinued, and subcutaneous insulin was started under the guidance of diabetic specialists. Additionally, she has been treated by oral doxycycline (200 mg daily) and topical Clobetasol



Figure 1: Multiple post bullous erosions on normally appearing skin.

once daily. This adverse event was reported to the pharmacovigilance center.

Three months after stopping Dapagliflozin the patient remained asymptomatic.

SGLT2i or Glifozines is a new class of oral anti-diabetic drugs with three approved molecules in Europe: Dapagliflozin, canagliflozin, empagliflozin.

Two cases of SGLT2i-induced pemphigoid have been reported in the literature.

Lkehara et al. reported the case of an 83-year-old man who presented BP 5 months after ipragliflozin and was treated with Corticosteroids 30mg/d with favorable evolution as soon as the drug was stopped [2]. Devson et al reported the case of a 59-year-old woman who presented BP 1 month after empagliflozin and was

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treated with oral and topical corticosteroids and Doxycycline [3].

No known cases of BP caused by Dapagliflozin and our case is the first reported in the literature.

In conclusion, clinicians should be vigilant for the rare yet potentially severe skin reactions associated with SGLT2 inhibitors, such as bullous pemphigoid, to ensure early detection and treatment, thus minimizing adverse effects.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

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