Sir,

Bullous pemphigoid (BP) is an autoimmune sub-epidermal blistering disorder with antibodies against BP180 and BP230 antigens. [1] BP is commonly seen in the elderly [2] who are associated with comorbidities and on medications for that. Several drugs are suspected to trigger or induce BP. A high index of suspicion and meticulous analysis often helps in the diagnosis of drug-induced BP.

Gliptins, a class of antidiabetic drugs, inhibit dipeptidyl peptidase-4, stimulate the release of insulin and reduce secretion of glucagons. [1] Available medications include sitagliptin, saxagliptin, linagliptin, alogliptin, vildagliptin, and teneligliptin. Recently, many cases of gliptin-induced BP have been seen. [3]

Here, we describe a case of 56-year-old female who was recently diagnosed with diabetes mellitus and was treated with oral hypoglycemic agents. She had no other comorbidities. Her blood sugar levels were poorly controlled on conventional antidiabetics. Hence, teneligliptin was started. One month after starting gliptins, she complained of generalized itching and increased the sensitivity of oral mucosa, with difficulty in eating spicy food. In 15 days, she developed fluid-filled reddish lesions with increased itching over upper back, waist, and tiny lesions on the shin.

On examination, there were erythematous crusted plaques with erosions over back [Figure 1]. Excoriated papules were present on the shin. No mucosal involvement was observed. Palms, soles, and nails were unremarkable.

Routine blood examination was done, and skin biopsy was performed. The provisional diagnosis was kept as gliptin-induced BP.

Complete blood count consisted of white blood cell: 11340 cells/c mm, haemoglobin: 12.7 mgs/dl, hematocrit: 46%, and platelet: 240000/ul. Differential count showed eosinophils 8% and hemoglobin A1C was 7.

Skin biopsy was performed which revealed a subepidermal cleft with inflammatory infiltrate composed predominantly of eosinophils and a few neutrophils in the dermis [Figure 2].

The patient was advised to stop the drug and was shifted to an alternate oral hypoglycemic agent. Topically clobetasol propionate and orally tablet nicotinamide 250 mg twice daily and capsule doxycycline 100 mg once daily were administered. The itching stopped within 3–4 days after starting treatment. Thereafter, no new lesions developed. There was a significant improvement of the lesions after 2 weeks of stopping the drug.

Our patient developed a nonspecific itching followed by bullae within a few weeks of starting gliptin. Intense pruritus unresponsive to antihistamines followed by skin lesions that correlated with the introduction of gliptin was noted. Tissue and blood eosinophilia with histopathological features of BP supported the diagnosis. There was a sustained remission achieved after withdrawal of gliptin therapy. This confirmed the diagnosis of gliptin-induced BP.

The mechanism by which drugs provoke an immune reaction to cause BP is unclear. It is extremely crucial to differentiate the idiopathic condition from a drug-induced one as clinically and histopathologically they are indistinguishable. One should take a detailed history and note all the medications that the patient is on, so as not to miss out a drug-induced condition. Furthermore, the elapsed time between beginning the treatment with suspected drug and onset of skin manifestations varies considerably from case to case. [3] Improvement of the lesions after withdrawal of the suspected drug confirms the diagnosis of drug-induced BP.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.
Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.