

IADVL's Textbook on

CUTANEOUS ADVERSE DRUG REACTIONS

A Comprehensive Guide

Chapter

18

Bullous Drug Reactions

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SUMMARY

Drug-induced bullous disorders include pemphigus, bullous pemphigoid, linear IgA bullous dermatosis, and pseudoporphyria. A wide variety of drugs can induce these disorders and the list is ever-increasing. These disorders are rare and often the association with drug intake is based on an anecdotal report. Drug-induced bullous dermatoses are often indistinguishable from the idiopathic disease. Clinical features are usually similar to the classical disease and high index of suspicion is required for diagnosis. Recent introduction of a new drug in the patient's therapeutic regimen, resolution of the symptoms on withdrawal of the drug, and no recurrence thereafter are the pointers to the diagnosis. Rechallenge is not recommended as the diseases may be severe in nature. Withdrawal of the drug is the first step in management. During the acute episode, the patients may be treated as in classical disease but adjuvant immunosuppressive therapy is not required.

INTRODUCTION

Drug-induced bullous disorders are unique as these do not come under the purview of classical adverse drug reactions despite drugs being involved in the causation. In general, the term "drug induced" has been used when there is rapid resolution of the dermatoses following withdrawal of the drug.¹ When there is onset of the dermatoses with drug intake but persists even after withdrawal of the drug, the term "drug triggered" is used.¹

Various drug-induced bullous disorders have been presented in Box 18.1. Of these, pemphigus, bullous pemphigoid (BP), and linear IgA bullous dermatosis (LAD) are immunobullous disorders. The other drug-induced pseudoporphyria. Table 18.1 lists the drugs causing these disorders.¹⁻¹⁰ However, this list is nonexhaustive; with invention of newer pharmacological agents, there are reports of newer drugs causing these disorders. Clinical features of these dermatoses are usually indistinguishable from those of classical ones. However, there are subtle hints of difference and high index of suspicion is necessary in the context of using the drugs known to cause these dermatoses. As these disorders are rare, pathogenesis is poorly understood. The possible

pathomechanism, clinical features, management, and prognosis of drug-induced bullous disorders have been discussed individually in the following section.

Box 18.1: Various drug-induced bullous disorders

- Drug-induced pemphigus
- Drug-induced bullous pemphigoid
- Drug-induced linear IgA disease
- Pseudoporphyria

DRUG-INDUCED PEMPHIGUS

Pathomechanism

There are four groups of drugs causing pemphigus: "thiol drugs", "amide drugs", "phenolic drugs", and "non-thiol, non-phenolic drugs".¹ In a series of 17 Japanese patients with drug-induced pemphigus, thiol-containing drugs were the commonest causative agent.¹¹ Drugs can induce acantholysis solely by biochemical mechanism or in combination with immune mechanism. In the former, drugs directly interfere with the keratinocyte architecture. In the latter, drugs induce autoantibody production to cause acantholysis.¹



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