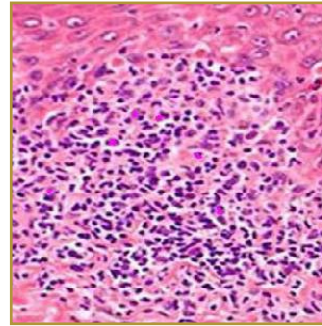
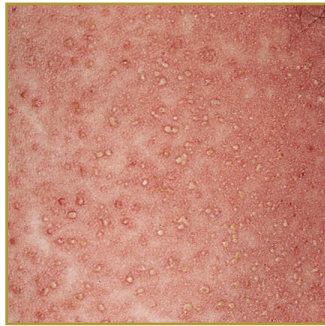




CUTANEOUS DRUG ERUPTIONS



EPIDEMIOLOGY: Occur in approximately 2-5% of inpatients and in greater than 1% of outpatients.

ETIOLOGY: Caused by ingestion, parenteral use, or local application of a drug

PATHOGENESIS: Mediated by immunologic and nonimmunologic mechanisms

CLINICAL: Measles-like viral exanthem; evanescent, raised, red, pruritic, well demarcated lesions; red, raised, well-demarcated plaques; fever, mucosal membrane involvement and full thickness epidermal sloughing; neutrophilic inflammation of blood vessels; asymmetrically distributed, erythematous, pruritic papules and vesicles

HISTOLOGY: Superficial and deep perivascular inflammatory cell infiltrates. Eosinophils in the infiltrate suggest such a drug eruption

CUTANEOUS DRUG ERUPTIONS vary in their appearance, rapidity of onset and severity. Coombs and Gell proposed four types of immunologically mediated reactions: Type I is immunoglobulin E (IgE)-dependent reactions, which result in urticaria, angioedema, and anaphylaxis. Type II is cytotoxic reactions, which result in hemolysis and purpura. Type III is immune complex reactions, which result in vasculitis, serum sickness, and urticaria. Type IV is delayed-type reactions with cell-mediated hypersensitivity, which result in contact dermatitis, exanthematous reactions, and photoallergic reactions. Nonimmunologically mediated reactions may be classified according to the following features: accumulation, adverse effects, direct release of mast cell mediators, idiosyncratic reactions, intolerance, Jarisch-Herxheimer phenomenon, over dosage, or phototoxic dermatitis. Diagnosing a mild asymptomatic reaction can be done by the patient's history and a physical examination. Severe or persistent eruptions may require further diagnostic testing. The main treatment is to identify the causative drug and withdraw the patient from it.

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