

NLM Citation: LiverTox: Clinical and Research Information on Drug-Induced Liver Injury [Internet]. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases; 2012-. Psoriasis Agents. [Updated 2016 Nov 2].

Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/



Psoriasis Agents

Updated: November 2, 2016.

OVERVIEW

Introduction

Psoriasis is a chronic inflammatory skin disease that affects up to 2.5% of the US population. Psoriasis varies greatly in severity, from an intermittent condition with a few localized patches of skin involvement, to a widespread serious skin disease with severe pruritus, extensive skin involvement, complications and disability. Psoriasis is associated with an inflammatory arthritis in at least 5% of cases. The typical psoriatic skin lesion is a raised, erythematous and sharply demarcated papule or plaque, often with a silvery crust. They are often pruritic. Histology shows acanthosis and inflammation with neutrophils and lymphocytes, which are rich in activated T cells. The etiology of psoriasis is not well defined, but it appears to be an autoimmune condition or a disease of immune dysregulation. The therapy of psoriasis ranges from topical ointments and oral therapies to intravenously or subcutaneously administered biologics. Milder cases can be managed by topical ointments, corticosteroids and vitamin D and retinoid derivatives. Systemic therapy is used for more severe disease or extensive skin involvement. Agents used include psoralen with ultraviolet light, methotrexate, acitretin, phosphodiesterase type 4 inhibitors (apremilast), cyclosporine or other immunomodulatory agents and, most recently, antitumor necrosis factor agents and monoclonal antibodies directed at activated T cells or their proinflammatory cytokines (secukinumab, ustekinumab). Psoriatic arthritis is typically treated similarly as rheumatoid arthritis.

Most of the agents used to treat severe psoriasis have other major uses, such as in cancer chemotherapy (methotrexate), organ transplantation (cyclosporine), and autoimmune diseases (antitumor necrosis factor agents, secukinumab, ustekinumab). Antipsoriatic medications that have been linked to cases of hepatotoxicity include methotrexate, acitretin and the tumor necrosis factor antagonists.

Antipsoriatic medications discussed in LiverTox include the following:

- Acitretin, Alefacept, Apremilast, Cyclosporine, Methotrexate, Psoralen (Methoxsalen)
- Monoclonal Antibodies
 - IL-17A Antagonists
 - Brodalumab, Ixekizumab, Secukinumab
 - Tumor Necrosis Factor Antagonists
 - Adalimumab, Certolizumab, Etanercept, Golimumab, Infliximab
 - Other
 - Efalizumab, Guselkumab, Tildrakizumab, Ustekinumab

2 LiverTox

ANNOTATED BIBLIOGRAPHY

References updated: 02 November 2016

Reuben A. Hepatotoxicity of immunosuppressive drugs. In, Kaplowitz N, DeLeve LD, eds. Drug-induced liver disease. 3rd ed. Amsterdam: Elsevier, 2011, pp. 569-91.

(Review of hepatotoxicity of immunosuppressive agents mentions that "the biological immunosuppressants are largely free from hepatotoxicity, with the exception of the TNF alpha antagonists").

Burkhart C, Morrell D, Goldsmith L. Dermatological pharmacology. In, Brunton LL, Chabner BA, Knollman BC, eds. Goodman & Gilman's the pharmacological basis of therapeutics. 12th ed. New York: McGraw-Hill, 2011, pp. 1803-32.

(Textbook of pharmacology and therapeutics).

Drugs for psoriasis. Med Lett Drugs Ther 2015; 57(1470): 81-4. PubMed PMID: 26035746.

(Concise review and guidelines for use of drugs to treat psoriasis).

Drugs for psoriatic arthritis. Med Lett Drugs Ther 2015; 57(1470): e88-92. PubMed PMID: 26035749.

(Concise review and guidelines for use of drugs to treat psoriatic arthritis).