

RETINOIDS IN DERMATOLOGY

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SUMMARY

Although vitamin A has been used in dermatology since the 1940's, it was the introduction of vitamin A acid in the early 1970's which began the retinoid revolution in dermatology. Topical retinoic acid has proved useful in the treatment of acne vulgaris and, more recently, photodamaged skin. The oral retinoids, isotretinoin and etretinate, have produced dramatic effects in patients with severe acne and psoriasis.

Oral isotretinoin was introduced into the United States in 1982 and provides dramatic clearing of the inflammatory lesions of acne. Indicated for the treatment of patients with severe, recalcitrant, nodulocystic acne unresponsive to conventional therapy including systemic antibiotics, oral isotretinoin also can provide prolonged if not permanent remission

of this most destructive form of the disease. Less severe forms of the disease may respond equally well, but do not appear to achieve prolonged remissions as readily. Women with endocrine abnormalities may also experience more frequent recurrences than hormonally normal patients.

Etretinate has proved most useful in the treatment of refractory psoriasis including extensive plaque type disease as well as pustular psoriasis. Although it may be used as monotherapy, it is most useful when combined with phototherapy such as PUVA or UVB.

Unfortunately oral retinoids are associated with significant toxicity. Most important, current oral retinoids are teratogenic and must not be given to pregnant women or women who may become pregnant during treatment. In addition, the long half life of etretinate precludes its use in women of child-bearing age unless there are overwhelming compelling therapeutic indication to do so.

The remainder of the retinoid side effects are usually manageable and less significant than the teratogenicity. These are essentially the toxicity associated with hypervitaminosis A. These include dry skin, chapped lips and cheilitis, dry eyes, dryness of other mucous membranes, hair loss, central nervous system effects and musculoskeletal symptoms. There may also be selected laboratory abnormalities, particularly in serum triglycerides. Elevation of the latter appear to be dose and diet related.

Some of these side effects have persisted beyond the treatment period. These include dry eyes, decreased night vision, hair loss and skeletal hyperostoses.

In light of this toxicity retinoids must be used judiciously in the treatment of skin disease. With proper patient selection and monitoring they can be among the most valuable therapeutic agents available to dermatologists.

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