# New Growth in Dermatology



Brian T. Kunimoto, MD, FRCPC Presented at The Annual Spring Dermatology Review for Family Physicians, March 2006

## **Dermatological** Facts...

2005 was a busy year for new developments in dermatology. New drugs for psoriasis, known as biologics, were released by Health Canada. In addition, there were new treatment options made available for hair removal, acne vulgaris and wound healing.

#### Point #1

There has been much interest in biologic agents in the treatment of psoriasis. Alefacept was the first to be released and is indicated for the treatment of moderate-to-severe psoriasis. This CD4 T-helper immunomodulator has been found to be able to induce a remission in psoriasis, without the risk of organ toxicity. Alefacept is prescribed at a dose of 15 mg intramuscularly, once a week for 12 weeks. A second course is recommended three months later. Studies have shown there to be a 75% reduction in the severity of psoriasis (PASI-75) in 33% of patients at 12 weeks of treatment.

More recently, a second biologic agent, etanercept, was released for the same indication. This Tumour Necrosis Factor antagonist is an antiinflammatory and is a suppressive agent in the management of psoriasis. It is administered subcutaneously by

self-injection, at a dose of 50 mg, two times a week for three months, followed by subcutaneous maintenance therapy of 50 mg once a week. The PASI-75 improvement was found in 49% of patients after 12 weeks of therapy.

Patients put on etanercept must not have active tuberculosis, hepatitis B or hepatitis C, or the HIV infection. It is relatively contraindicated if there is a family history of demyelinating disorders. Like alefacept, there has been no major organ toxicity seen. Both drugs are very expensive, but are currently covered by most extended health plans.

Lastly, a new clobetasol lotion was released for use in topical treatment of plaque-type psoriasis. Efficacy has been found to be equivalent to that of clobetasol cream.

## Point #2

Eflornithine cream was released for use in hair removal. This ornithine decarboxylase inhibitor shortens the growth phase of the hair cycle.

It functions as an adjunct to other hair removal modalities.

## Point #3

A new cream preparation containing clindamycin was released for the management of acne vulgaris. Clindamycin 1% cream was developed as an alternative to lotion

preparations that may cause peeling and drying of facial skin. Studies have shown it to be well-tolerated and effective when applied twice a day.

## **Dermatology**

### **Dermatological** Facts...

Consensus statements were released regarding the safety of cyproterone acetate/ethinyl estradiol and the calcineurin inhibitors.

#### **Dermatological** Facts...

More information has become available on the relationship between isotretinoin and major depression.

### Point #4

In a double blind study, a new dressing for venous leg ulcers, porcine intestinal submucosa has found to significantly improve healing. It may serve as an adjunctive therapy as it is compatible with many commonly used dressings. A new agent, Cicaplast, was released in March 2006 for use as a post-cosmetic surgical healing agent in laser therapy, dermabrasion and chemical peels.

## Point #5

Over the past year, there have been a few issues in dermatologic therapeutics. Cyproterone acetate—indicated for the management of women with severe acne vulgaris—has been identified by many lay publications and on the internet as being a drug that significantly increases the risk for the development of venous thromboembolism (VTE). Further study has revealed that this risk is not significantly greater than that of other oral contraceptives. The positions of the Canadian Dermatology Association and the Society of Obstetricians and Gynecologists of Canada are in keeping with this data.

A second issue that reached prominence involved the calcineurin inhibitors, tacrolimus and pimecrolimus. Because of non-human studies, these immunosuppressive agents have been suspected of enhancing the development of lymphoma. As a result, the Food and Drug Administration considered placing a black box warning on these two agents. However, so far this has not happened. Subsequent post-marketing studies have not shown any

increased risk for cancer associated with the use of these drugs. Furthermore, there has not been any evidence of systemic immunosuppression when used in children. These agents are well-suited for the treatment of atopic eczema in children, particularly in areas like the face, where more potent topical steroids might cause adverse effects, such as atrophy and ocular problems.

There has also been ongoing concern expressed in the lay press and on the Internet, regarding the risk of major depression and suicide with the use of isotretinoin for severe acne vulgaris. This has prompted the FDA to establish a patient/caregiver/pharmacist registry in the US. Currently, Health Canada has no such plans, but there are no guarantees. Clinical studies do not provide unequivocal evidence supporting such concerns. A recent comparison study of 132 patients examined 59 subjects taking isotretinoin and 73 subjects who did not take this medication. With respect to depressive symptoms or suicidal ideation, no difference was found between the two groups.

cme

Dr. Kunimoto is a Clinical Associate Professor of the Department of Dermatology, University of British Columbia. He is also the Director of Continuing Medical Education.