

# UT News

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August 7, 1987

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\*\*\*\*Corrective dermatology helps reverse the ill effects of aging, acne and sun damage

DALLAS -- Cosmetic skin problems that can't be camouflaged with paint and powder can often be corrected with the latest in medical science and technology.

With a keen eye toward aesthetics, dermatologists can selectively use laser treatment, collagen injections, sun screens and retinoic acid to "reverse" the ill effects of aging, disease and injury, according to Dr. Denis Beaudoin (pronounced Bow-dwin), assistant professor of dermatology at The University of Texas Health Science Center at Dallas. Beaudoin is director of the Cutaneous Laser Surgery Clinic and the Pigmented Lesion Clinic at UTHSCD Aston Center.

Laser therapy, using the Argon/Dye laser, is effective in removing the spidery or broken blood vessels that sometimes develop on the face and legs, he says. The blue-green light of the argon laser is selectively absorbed by dark colors. When the laser's rays are passed over red blood vessels, they are absorbed by the red blood cells, causing the blood to heat rapidly and coagulate. After treatment, the vessels are replaced by scar tissue and gradually fade within a few weeks to several months.

The argon/dye laser can also be used effectively to treat vascular birthmarks, such as port wine stains, says Beaudoin.

An injectable form of collagen is available to build up indentations in the skin. Natural collagen and elastic tissue--the substances that normally cushion and support the skin--are worn away by the aging process, sun damage or chronic acne. Longtime exposure to sunlight, for example, causes wrinkles when elastic fibers are replaced with stiff fibers that make the skin less soft and resilient. Where damage occurs, a depressed line or scar can form.

The injectable material, a purified animal collagen, is readily accepted by the body and behaves as though it were the body's own substance. Since the material is gradually absorbed with time, it becomes necessary to repeat treatment about once a year.

Sunscreen in the morning and retinoic acid at night can be used as an effective anti-aging regimen for both men and women, says Beaudoin. The two preparations can restore a youthful appearance by giving the skin back its elasticity and otherwise reversing some of the wrinkling that aging and sun damage can cause.

Topical retinoic acid, a derivative of Vitamin A, has been shown to speed up the turnover rate of cells within the skin. At the same time, it seems to restore some of the finger-like projections of blood vessels between the epidermis on the skin surface and the underlying dermis. These are present in young skin but disappear with age.

(More)

Beaudoing says that the retinoic acid treatment usually takes from three to six months of treatment before improvement is noticeable. Also, patients need to build up their tolerance to retinoic acid gradually to avoid the irritation initially associated with the medicine.

The use of an effective sunscreen in conjunction with retinoic acid is vital in achieving maximum beneficial effects, since reversal of sun damage is negated if the patient continues to go into the sunlight unprotected. A sunscreen with a high sun protection factor (SPF) number is best. The higher the SPF number, the greater the protection and the longer one can endure the sun's rays without burning. Besides blocking the sun's damaging rays, a sunscreen also acts as a moisturizer during the day. While sunscreens are easily purchased as over-the-counter preparations, retinoic acid must be prescribed by a doctor.

Dermatologists have noted that greater improvements from treatment with sunscreen and retinoic acid have been observed in light-eyed fair-skinned patients, who are the ones actually more prone to becoming sunburned, than in those with darker coloring.

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Distribution: AA,AB,AC,AF,AF1,AG,AG1,AH,AI,AK,AK1,AM,SC,SL

NOTE: The University of Texas Health Science Center at Dallas comprises Southwestern Medical School, Southwestern Graduate School of Biomedical Sciences and the School of Allied Health Sciences.