
Sun Damage

Treatment of Sun Damage with Active FX laser (video)

What does sun damage look like?

There are many components to sun damaged skin. Many people immediately think of wrinkles as one of the hallmarks of too much time in the sun, but also brown spots, white spots, red mottled skin on the neck, spider veins, thinning of the skin, purple bleeding spots on the skin, blackheads, milia, yellowish areas of skin and leathery-looking skin are all manifestations of premature aging due to ultraviolet light. These are in addition to skin cancers such as actinic keratoses, basal cell carcinoma, squamous cell carcinoma and melanoma which are also due to excessive sun or ultraviolet exposure. Ultraviolet exposure also occurs with tanning bed use.

Ultraviolet damage makes a person look older than their age. Many people who work outdoors begin to have an aged appearance in their 30s or 40s and they can develop skin cancers at an earlier age too. There is a myth that many people believe: "if you spent a lot of time at the beach when you were younger, you're stuck with the damage and you might as well live with it." This is completely false: if you have already developed some signs of sun damage, it's not too late to do something about it.

What can be done to prevent sun damage?

First of all, prevention is the best way to avoid sun damage. Walk the dog, garden or play tennis early in the morning or in the evening when the sun's rays are the weakest. Definitely do not participate in these activities between the peak ultraviolet intensity hours of 10 am to 3 pm. Always wear a hat and long sleeves and long pants if you have to be outdoors during the peak hours. Think about it: Westerners are the only culture in the world that doesn't wear protective clothing, and we're the fairest skinned people and the most susceptible to sunburns, skin cancers and aging. Sunscreens should be applied only as a final measure; the other factors above, should take priority. In other words, sunscreens will not protect you from sun damage if you don't use common sense.

What about Vitamin D deficiency?

Recent claims of vitamin D deficiency from zealous sun protection are probably overstated. Only about 10 minutes of morning sun exposure on the face and arms is enough to generate the daily requirement of vitamin D. If you live in northern climates, you probably aren't receiving enough daily sunlight but this is due to cold weather and rainy climates rather than appropriate sun protection. Vitamin D supplementation may be recommended by your physician, especially if you suffer frequent colds or have osteoporosis.

What if I look healthier with a tan?

There is no safe tan. The ultraviolet light emitted from tanning beds goes deep into the skin, damaging structures in the dermis of the skin including collagen and elastic fibers, injuring the blood vessels and causing mutations in the epidermal cells that can lead to skin cancer. This damage will appear as wrinkles, skin coarseness, blotchy pigment changes and spider veins within a few years of exposure.

There are spray tans or tanning lotions that will allow you to look tan for an event or photograph and these do not lead to skin cancer or other sun damage.

I'm already sun damaged. What can I do to reverse it?

The good news is that the skin has DNA repair mechanisms that are constantly at work. If you expose your skin over and over to ultraviolet light, these repair functions can't catch up with the damage. But if you cover up and avoid further damage, the skin will naturally heal to some degree.

There are many new treatment modalities which can actually reverse some of the damage.

First, the topical treatments:

#Vitamin C serum and Vitamin E lotion are excellent at blocking the entire spectrum of ultraviolet light. These antioxidants also repair sun damage by stimulating collagen production and normalizing the tone and texture of the skin.

#Peptides such as Strivectin have also been shown in studies to improve the skin's texture.

#Retin-A or Renova also improve fine wrinkles and pigment changes due to sun damage. A prescription is required for these medications.

Next the injectable therapies:

#Botox is well-known for its ability to relax forehead wrinkles, frown lines and crow's feet. It can also be used to better define a sagging jawline or to improve upper lip wrinkles.

#Injectable fillers such as Radiesse and Juvederm are also useful for bringing back the fullness of the cheeks and lifting a sagging lower face.

Finally, the light-based therapies: Lasers and Intense Pulsed Light (IPL):

#IPL is a good way to decrease the redness associated with rosacea and general flushing of the cheeks or neck due to chronic sun exposure.

#The pulsed dye laser is excellent for removing spider veins on the face and age spots on the face and hands.

#Fractional CO2 resurfacing lasers are the gold standard for overall improvement in tone and texture, removing fine wrinkles, erasing pigment blotchiness and tightening lax eyelid and neck skin. This laser also removes early skin cancers in the process.

A combination approach using all these modes of therapy usually gives the most longlasting and natural results in reversing sun damage.

