ACTINIC DAMAGE - See also Telangiectasia

Actinic damage, also called sun damage, represents skin changes due to excessive sun exposure. Ultraviolet light A (UVA) interferes with DNA repair through the release of reactive oxygen, resulting in oxidation of both protein and lipids, whereas ultraviolet light B (UVB) causes DNA mutations.

Signs of sun damage include:
- Atrophy – thinning of the skin
- Elasticity reduction
- Erythema - redness
- Freckles and other hyperpigmented lesions
- Hypertrophy – thickening of the skin
- Immunosuppression
- Photosensitivity
- Sunburn
- Suntan
- Telangiectasia – broken blood vessels
- Wrinkles

With more extensive sun exposure, there is the risk of developing skin cancer:
- Actinic keratosis – precancerous lesion
- Basal cell carcinoma
- Melanoma
- Squamous cell carcinoma

Skin cancer is completely curable when treated in the early stages.

Photoaging may be defined as the damage from sunlight, as opposed to normal aging, where the skin loses its elasticity, becomes thinner, and develops fragility. The two processes may be indistinguishable.

Some sunlight exposure is beneficial, but too much sun is not good.
- Limit time under the sun
- Avoid sun exposure between 10 AM and 4 PM

Be reasonable under the sun should be the motto and use sun protection:
- Appropriate clothing that does not allow sun to hit the skin and wearing a hat
- Appropriate sunscreens
  - High SPF (sun protective factor)
  - Both UVA and UVB protection
  - Frequent applications
    - First application 15 to 30 minutes before sun exposure
    - Repeat applications every two hours
    - Critical areas are hands, shoulders, and face
    - N.B. not for babies younger than six months