Age, sunlight, and facial skin: a histologic and quantitative study.


ABSTRACT

Quantitative methods were developed to assess the interrelation between age and sunlight on the facial skin of healthy women living in the same sunny area.

The women were grouped into the following categories: young versus old and low versus high solar exposure.

The features evaluated were perceived age, amount of facial wrinkling, skin color, and skin elasticity.

A punch biopsy specimen of cheek skin was obtained and prepared histologically for evaluation of solar elastosis.

The histologic examination was complemented by quantification of collagen and elastin by computer-assessed image analysis. Perceived age was estimated by untrained women viewing high quality photographs. As expected, those with greater sun exposure looked older and had more wrinkles, more severe elastosis, increased elastin, and decreased collagen.