Skin protection for photosensitized patients

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The goal of this study was to evaluate various creams for their capability to protect photosensitized skin from visible light.

Study Design/Materials and Methods

Two cover creams and creams containing various combinations of Vaseline with TiO2, ZnO, and Fe2O3 were used to measure the reduced light transmission and the light absorption spectrum. In vitro and in vivo tests were performed to assess the protection from light by above mentioned compounds.

Results

The cover creams and the 50% TiO2 cream showed similar efficacy in reducing light transmission, while the sunscreen was less efficient by a factor of 5. Cell protection by 25% TiO2+25% ZnO, TiO2, or the cover creams was more efficient than protection by the sunscreen or other compounds. In vivo, the dark cover cream protected the skin by a factor of 3.4 better than the sunscreen.

Conclusions


keywords

5-ALA; cover cream; human keratinocytes; m-THPC, PDT; sunscreen;
titan dioxide;
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