Tom Cruise smile comes with a sunburn price

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UV tooth bleaching treatment

(PhysOrg.com) -- UV light-enhanced tooth bleaching is not only a con, but is dangerous to your eyes and skin, says a Royal Society of Chemistry journal.

The light treatment gives absolutely no benefit over bleaching without UV, and damages skin and eyes up to four times as much as sunbathing, reports a study in *Photochemical & Photobiological Sciences*.

Those looking to match Tom Cruise's glittering pearly-whites would be better off ignoring claims of better bleaching with UV light treatment.

The treatment is at least as damaging to skin and eyes as sunbathing in

Hyde Park for a midsummer's afternoon - one lamp actually gave four times that level of radiation exposure.

And as with sunbathing, fair-skinned or light-sensitive people are at even greater risk, said lead author Ellen Bruzell of the Nordic Institute of Dental Materials.

Bruzell also found that bleaching damaged teeth. She saw more exposed grooves on the enamel surface of bleached teeth than on unbleached teeth. These grooves make the teeth more vulnerable to mechanical stress.

Tooth bleaching is one of the most popular cosmetic dental treatments available. It uses a bleaching agent - usually hydrogen peroxide - to remove stains such as those from red wine, tea and coffee, and smoking.

UV light is claimed to further activate the oxidation process, improving bleaching efficiency. The authors of this *Photochemical & Photobiological Sciences* article say there is very little substantive evidence to support this claim, and their new study finds no benefit to using UV light.

Article: Ellen M. Bruzell, Photochem. Photobiol. Sci., 2009, DOI: 10.1039/b813132e

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