

11942-6

Effectiveness of whitening treatments employing violet illumination alone or combined with bleaching agents

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Hide Abstract –

Tooth whitening has grown as one of the most requested dental procedures. However, in-office procedures typically involve using bleaching agents which may have detrimental dental effects. Violet illumination alone has been proposed as an alternative to reduce tooth sensitivity while keeping desired whitening effects. In this study, we assessed the effectiveness of whitening treatments using violet illumination (VI) alone or combined with 35% hydrogen peroxide (HP) gel, as well as cleaning teeth with and without mineral oil. Our results suggested that the VI + gel whitening treatment was able to completely restore the teeth whiteness, while the VI + oil treatment was 3.7 times more effective compared to VI treatment.