減緩強力美白後初期迴色表面處理材料評估之體外實驗

In vitro evaluation of surface treatment materials in power bleached teeth for retarding the initial color relapse

中文摘要

利用美白藥劑改善活牙牙齒顏色的居家美白術已有很長的歷史及不錯的成效，但所須之治療時間太長，所以加上不同光照的強力美白術，治療時間短，能快速的獲得美白效果，已逐漸成爲臨床美容牙科的主流。但不管採用何者美白法，在美白完成後，顏色表現皆非穩定，在初期即有明顯迴色現象即(initial color relapse)，此初期迴色雖然很早即被觀察到，但相關研究卻很缺乏，是否因美白後造成牙釉質表面的改變，而利於色層沾黏，尚待進一步研究。初期迴色會造成美白效果的減少，如何減緩此一效應，是一項挑戰。在牙科臨床上，我們可以利用樹脂表面保護劑，創造光滑的表面，有效降低樹脂項補物的著色。本研究即嘗試取此特性，利用一種樹脂表面保護劑作爲美白後的表面保護，希望能得到減緩初期迴色，增加美白效果。並更進一步，探討有經樹脂表面保護劑作爲美白的牙齒顏色，與無經樹脂表面保護劑處理的牙齒顏色迴色機制上的差異。

英文摘要

Resin without filler possesses the better properties such as lower viscosity, better flowability, as well as well to resistance microleakage as resin shrinking. The application is successful in clinical in vive and in vitro. The Brightener III with low-viscosity and high mobility enhanced the relative wear resistance of the four evaluated materials when comparing with those unprotected groups. Therefore, tooth-colored restorative materials with the application of Brightener III could improve their mechanical properties effectively. The purpose of this in vitro study was to evaluate the effect of colour relapse on bleaching surface with surface protector after power bleaching, when used for a short period of time and over a prolonged period of time. The mechanism of colour relapse after bleaching will be discussed clearly. In addition, the various bleaching source is also devoted to compare together.