

POTENSI ANTIOKSIDAN TEH HIJAU DAN BIJI ANGGUR TERHADAP *SHEAR BOND STRENGTH* RESTORASI RESIN KOMPOSIT PASCA *BLEACHING*

INTISARI

Proses *bleaching* akan menyisakan residu radikal bebas sehingga dapat menyebabkan penurunan *shear bond strength* restorasi resin komposit. Teh hijau dan biji anggur merupakan antioksidan alami yang cukup kuat sehingga berpotensi meningkatkan *shear bond strength* restorasi resin komposit pasca *bleaching* melalui reaksinya dengan radikal bebas. Tujuan dari *narrative review* ini untuk mengetahui potensi antioksidan teh hijau dan biji anggur terhadap *shear bond strength* restorasi resin komposit pasca *bleaching*.

Review dilakukan dengan mencari *literature* dari *database* yang telah ditentukan yaitu PubMed, Science Direct, Scopus, SAGE Journals, Elsevier, dan Google Scholar. Pencarian Pustaka menggunakan kata kunci *tooth bleaching, hydrogen peroxide, carbamide peroxide, bleaching AND shear bond strength, free radicals AND antioxidant, antioxidant AND shear bond strength, green tea AND shear bond strength, grape seed AND shear bond strength, antioxidant capacity of green tea, antioxidant capacity of grape seed, shear bond strength, composite resin, grape seed, grape seed proanthocyanidins, dan green tea*. Pustaka diseleksi menggunakan kriteria inklusi berupa jurnal dan buku yang terbit tahun 2011-2021 serta masuk dalam kategori SINTA S1-S2 dan *Schicago* Q1-Q4. Kriteria eksklusi yang digunakan yaitu jurnal yang tidak dapat diakses dengan lengkap serta tidak memiliki metode penelitian, pendahuluan dan *keyword*. Berdasarkan kriteria inklusi dan eksklusi tersebut didapatkan 67 jurnal.

Hasil *review* menunjukkan bahwa teh hijau dan biji anggur memiliki potensi antioksidan yang tinggi karena mengandung senyawa flavonoid *epigallocatechin gallate* (teh hijau) dan flavonoid *proanthocyanidins* (biji anggur) sehingga dapat meningkatkan *shear bond strength* restorasi resin komposit pasca *bleaching*.

Kata kunci: *shear bond strength*, resin komposit, *bleaching*, antioksidan, teh hijau, biji anggur.

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ABSTRACT

Bleaching process will leave free radical residues that can cause a decrease in the shear bond strength of composite resin restorations. Green tea and grape seeds are natural antioxidants that are enough strong that they potentially increase shear bond strength of composite resin restoration post bleaching through its reaction with free radicals. The purpose of this narrative review is to know the potential of green tea and grape seeds' antioxidant with shear bond strength of composite resin restoration post bleaching.

The literatures used to this narrative review are Pubmed, ScienceDirect, Scopus, SAGE Journals, Springer Link, and Google Scholar. The literature search uses keywords tooth bleaching, hydrogen peroxide, carbamide peroxide, bleaching AND shear bond strength, free radicals AND antioxidant, antioxidant AND shear bond strength, green tea AND shear bond strength, grape seed AND shear bond strength, antioxidant capacity of green tea, antioxidant capacity of grape seed, shear bond strength, composite resin. The literatures were selected using inclusion criteria in the form of journals and books published in 2011-2021 and included in the SINTA S1-S2 and Schimago Q1-Q4 categories. The exclusion criteria used are journals that cannot be accessed completely and do not have research methods, introductions and keywords. Based on the inclusion and exclusion criteria, 67 journals were obtained.

The results of the review show that green tea and grape seed have high antioxidant potential because they contain flavonoid epigallocatechin gallate (green tea) and flavonoid proanthocyanidins (grape seeds) so that they can increase the shear bond strength of post-bleaching composite resin restorations.

Keyword: shear bond strength, composite resin, bleaching, antioxidant, green tea, grape seeds