

Efek penambahan steroid pada semen berbasis kalsium silikat terhadap viabilitas sel fibroblas = Effect of steroid addition in calcium silicate based cement on fibroblast cells viability

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Abstrak

ABSTRAK
Latar Belakang: Berbagai material kaping pulpa berbahan dasar kalsium silikat terus dikembangkan, diantaranya semen berbasis kalsium silikat dengan penambahan steroid. Tujuan: Menganalisis efek penambahan steroid pada semen berbasis kalsium silikat terhadap viabilitas sel fibroblas. Metode: Sel fibroblas embrio ayam direndam dalam ekstrak larutan semen berbasis kalsium silikat dengan penambahan steroid dan MTA. Viabilitas sel dihitung dengan menggunakan uji MTT. Hasil: Terdapat perbedaan bermakna ($p < 0,05$) viabilitas sel pada kelompok semen berbasis kalsium silikat dengan penambahan steroid dibandingkan kelompok kontrol dan MTA. Kesimpulan: Penambahan steroid menurunkan viabilitas sel. Terdapat peningkatan pada 72 jam, yang menandakan terjadinya proliferasi sel.

ABSTRACT
Background: Calcium silicate based materials are being developed continuously, one of them is calcium silicate based cement containing steroid. Objective: To analyze the effect of steroid addition in calcium silicate based cement on fibroblast cells viability. Methods: Chicken embryonic fibroblast cells were immersed in extract solution of calcium silicate based cement containing steroid and MTA. Viability was analyzed by MTT Assay. Results: Significant difference ($p < 0,05$) of viability on calcium silicate based cement containing steroid group was found, compared to control and MTA group. Conclusion: Steroid addition decrease viability. There was an increase in 72 hours, marking cells proliferation.

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