

## **Perbedaan Toksisitas Pasta Pengisian Saluran Akar Kalsium Hidroksida dan Ekstrak Propolis Terhadap Sel Fibroblas**

### ***Toxicity Difference Between Root Canal Filling Gell with Calcium Hidroksida and Propolis Extract into Fibroblast***

#### ***Abstract***

**Background.** *Calcium hidroksida is one of gel that often be used for endodontic treatment. It was known as root canal treatment since 1920's. Calcium hidroksida has low toxicity for human body, but human being has a divine hopeto back to the nature, because of that attitude a chemical made from bee's propolis is used. Propolis is expected to be able to become an alternative for new filling compound of root canal treatment which has lower toxicity than calcium hidroksida.*

**Purpose.** *To find out the toxicity differences between calcium hidroksida gel and the extract propolis in fibroblast. Methods.* *The already incubate fibroblast for a day is put into microplate than it given propolis extract with 12,5%, 7% and 3% and calcium hidroksida for 4 hours. For counting living cell it added 15  $\mu$  MTT be poured in PBS, stored for 4 hours with 37°C of temperature, and Elisa reactor is put on top of it for calculating the remaining cell, the most living cell will be proof of the least toxicity of the chemicals used. Results.* *The most living cell value is bound to propolis 12,5% and the lowest calcium hidroksida. This has proven that propolis has got the least toxicity than calcium hidroksida, for that reason propolis has a big chance to become the brand new root canal filling compound. Conclusion.* *Propolis has got the least toxicity than calcium hidroksida.*

**Keywords :** *Toxicity, Calcium Hidroksida, Propolis, Root canal filling gell*