

UJI TOKSISITAS PADA TEGDMA DAN HEMA DENGAN KONSENTRASI 0,75mM dan 4mM PADA KULTUR SEL FIBROBLAS BHK-21

(TOXICITY ASSAY IN HEMA AND TEGDMA AT CONCENTRATION 0,75mM AND 4mM IN FIBROBLAST CELL BHK-21)

ABSTRAK

Introduction. HEMA and TEGDMA is derivate of methyl methacrylate. Hydrolysis of HEMA generates acid methacrylate and etyleneglucol and hydrolysis of the TEGDMA produces acid methacrylate and triethylene glucol. Both of these often use as material in dentistry. **Purpose.** The aim of this study to differentiate the toxicity of HEMA and TEGDMA in BHK fibroblast cell with MTT assay. **Method.** fibroblast cells culture BHK-21 (Baby Hamster Kidney-21) is divided into two groups. HEMA dan TEGDMA divided into 2 concentration, 0,75mM and 4mM. Culture cell of HEMA and TEGDMA incubated at 37°C for overnight (24 hours). After incubated, ELISA Readers used to read the result of the experiment. The data were compared and examined by One way ANOVA and HSD Tukey test. **Result.** : toxicity of HEMA at concentration 0,75mM and 4mM is lower than toxicity of TEGDMA at the same concentration. The results of the study showed that cell death of TEGDMA is higher than HEMA. **Conclusion.** HEMA and TEGDMA have non toxic effect in fibroblast cell of BHK21 at concentration 0,75mM and 4Mm and the study found there is proliferasi cell of BHK-21 at those concentration.

Key words : HEMA, TEGDMA, Fibroblast BHK-21, toxicity