

Pengaruh bahan pemutih gigi karbamid peroksida terhadap mukosa rongga mulut secara mikroskopik (penelitian pada tikus wistar strain LMR)

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20437811&lokasi=lokal>

Abstrak

Nowadays the use of over the counter (OTC) bleaching material become more popular. The most common composition of this OTC material is mainly carbamide peroxyde and hydrogen peroxyde in various concentration. There many methods for using carbamide peroxyde as bleaching material, such as spray, gel tray or applicable solution, etc. According to the using methods, the possibility contamination between the material and oral mucous membrane is very high. The purpose of this research is to examine the effect of 2% carbamide peroxyde solution on oral mucous membrane. Materials and method : 30 rats of wistar strain divided to 2 groups, the control group consist of 10 rats, and experimental group of 20 rats. The animal of control group received application on their labial vestibulum with aquadest, while for the experimental group applicated with 2% carbamide peroxyde solution. The applications were done for 1 minute, 3 times daily with 10 minutes interval periods. 5 rats of the control group and 10 of the experimental group were killed by epidural anaesthetic after 1 day application. The rest animals were killed after 3 days application. Inferior labia then taken as the specimen, fixated using formaldehyde and processed for microscopic slides stained with HE. Microscopic analyze were done using modified inflammation scoring system developed by Eda & Fukuyama. Statistical analyze shows that there are significant differences of the experimental group inflammation compare to control group, both for 1 day and 3 days application. However there are no differences of oral mucous inflammation between 1 day and 3 days application for both control and experimental groups. Based on this research's result, it can be concluded that bleaching material contain carbamide peroxyde can caused oral mucous inflammation.