

42. Comparative evaluation of efficacy of anti fungal activity of activity of azadirachta indica, melaleuca oil and cocos nucifera oil against candida albicans incorporated in soft relining materials”

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Objectives: the incorporation of phytotherapeutic agents, azadirachta indica (neem oil), melaleuca alternifolia oil (tea-tree oil) and cocos nucifera oil (coconut oil) were tested for their efficacy as anti fungal agents against candida albicans . **Method:** the minimum inhibitory concentration (mic) against c. Albicans atcc 24433 was calculated using the broth microdilution method. Based on the preliminary screening results for mic, tissue conditioner samples were prepared to evaluate the zone of inhibition and minimum most effective concentration. Anti fungal activity of the minimum most effective concentration of the three oils was assessed and compared by measuring the mean zone of inhibition. Anti fungal activity of the minimum most effective concentration of the three oils was assessed using one way analysis of variance (anova) and post hoc test.. **Results:** inhibition against candida albicans was exhibited when 20%v/v, 25%v/v and 15% v/v of cocos nucifera oil, melaleuca alternifolia oil and azadirachta indica oil was used. The results of anova and post hoc test at the end of 48 hrs and 7 days suggested that all three oils were significantly different from each other [p value (0.000)] and azadirachta indica / neem oil with 15% concentration had the best anti fungal activity at the end of 48 hours and 7 days.. **Conclusion:** the anti-mycotic activity of m. Alternifolia, c. Nucifera and a. Indica mixed with the viscogel tissue conditioner can be used as an alternative therapy for denture stomatitis. .

DOI: 10.4103/0972-4052.246653