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**A Clinical Effectiveness of Patoladi Lepa Pratisarana and
Mustadi Taila Gandusha in the Management of
Krimidanta (Dental Caries)**

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Thesis submitted to the Institute of Indigenous Medicine, University of
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[MD(Ayu)] on "A Clinical Effectiveness of Patoladi Lepa Pratisarana
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(Dental Caries)", on 04th of December 2015.

ABSTRACT

A Clinical Effectiveness of Patoladi Lepa Pratisarana and Mustadi Taila Gandusha in the Management of Krimidanta (Dental Caries).

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Oral health afflictions arise in globally, mainly a result of two oral diseases viz; Dental Caries and Periodontal Diseases. More than 50% of Sri Lankan and 36% of world population are suffering from dental caries. So dental caries still remains a global problem. Once it occurs, its manifestations persist throughout life even though the lesion is treated. Krimidanta and Dental Caries have same clinical features, which is manifested by vitiated Vata, Kapha and Rakta Doshas. Patoladi Lepa and Mustadi Taila are prescribed in Chakra Datta as local remedies for "Krimidanta". In the present study, assessed three components, such as the quality of the above formulations, effectiveness of microbial inhibition & clinical trial. Patoladi Lepa was assessed by pH value, colouring matter, total ash, water soluble ash, acid insoluble ash, heavy metals (As,Pb) and TLC finger print. Mustadi Taila was assessed by Colouring matter, specific gravity, saponification value, peroxide value, acid value and iodine value, heavy metals (As,Pb) and TLC finger print. Both formulas were assessed by organoleptic properties (colour, appearance, taste). Disk diffusion method was used for determination of drug effectiveness on microorganisms. The sample was 90 ; 30 in each Group A, B and C who were selected by using stratified random sampling method. Group A, Group B and Group C were given Patoladi Lepa Pratisarana, Mustadi Taila Gandusha and combination of above drugs respectively. Patoladi Lepa appeared to be semi solid, blackish brown pungent taste and no synthetic dyes were present. In addition, pH value, total ash, water-soluble ash and acid insoluble ash were 5.8 ± 1 at 29°C , 12.1 ± 0.018 % w/w, 1.8 ± 0.012 % w/w and 0.24 ± 0.0002 % w/w respectively. As and Pb were not detected and TLC finger print profile consists 11 prominent spots under UV light. Mustadi Taila appeared to be brownish orange, viscous oil with characteristic sesame oil odour and pleasant taste. As well as specific gravity, saponification value, peroxide value, acid value and iodine value were 0.9225 ± 0.0003 , 211.3 ± 0.9 mg/g, 33 ± 0.1 milliequivalents/kg, 3.8 ± 0.1 mg KOH/g and 96.0 ± 1.2 I₂100/g respectively. As and Pb were not detected and TLC finger print profile consists 10 prominent spots under

UV light. In this study inhibition growth of *Actinomyces*, *Viridans streptococci* and *Lactobacillus* were detected Mustadi Taila than Patoladi Lepa. The effect of treatment was assessed by subjective and objective parameters (Salivary pH, Oral Hygiene Index, Stone's Index and IOPA X-ray). Group A provided better results in the improvement of Danta shula, Sopha, Mukhadurgandhyata, Danta harsha, Animitta ruja, Salivary pH and OHI. Group B & C provided better results in the improvement of Danta shula, Sopha, Mukhadurgandhyata, Chalata, Danta harsha, Animitta ruja, Salivary pH and OHI. There was no improvement in Chidrata and Krishnata with individual and combine therapies. In view of all the subjective & objective parameters and recurrences of the clinical features, combine therapy has shown more effectiveness than individual formulations. This study can be concluded that combination of Patoladi Lepa Pratisarana and Mustadi Taila Gandusha was provided best results. In addition, those formulations have no effectiveness in Krishnata and Chidrata in Krimidanta. Therefore, these formulations can be used for early stage of Krimidanta as a prophylactic measures.

Keywords: Patoladi Lepa, Mustadi Taila, Oral Hygiene Index