

## A Histopathological Study on Leech (*Hirudo medicinalis*) Application in the Management of Vicarcikā (Eczema)

**Authors :** K. M. Pratap Shankar, Dattatreya Rao, Sai Prasad

**Abstract :** Background: Skin diseases are among the most common health problems worldwide and are associated with a considerable burden. Eczema is such a skin ailment which cause psychological, social and financial burden on the patient and their families. Management of eczema with antibiotics, antihistamines, steroids etc., are available but even after their use relapses, recurrences and other complications are very common. Aim: The aim of this study was to assess the efficacy of leech application in the management of vicarcikā (Eczema) with Histopathological study. Methods: For the present study 10 patients having the classical symptoms of Vicarcikā, were randomly selected as per the inclusion and exclusion criteria from O.P.D. & I.P.D. sections of Śalya department, S.V. Āyurvedic Hospital, Tirupati. Minimum 4 sittings of Leech application was carried out with seven days interval. Total duration of treatment was 6 weeks. Biopsy samples were collected from the lesion site before and after treatment. Histopathological examination was done by the pathologist. Results: In eczema (dermatitis) the leech application therapy gives excellent response by reducing the inflammatory component, hyperkeratosis, spongiosis, irregular acanthosis and by evoking a granulation tissue response in the dermis and in most of the cases with complete recovery from the lesion. Most of the cases in the study were chronic dermatitis and seborrheic keratosis, almost all local/focal pigmented lesions is totally relieved by leech therapy especially in cases of seborrheic keratosis. Conclusion: In the present study it was found that, leech application evokes significant changes at histological level specifically in reduction of inflammatory component, hyperkeratosis, spongiosis and irregular acanthosis. It was also found that there was a considerable formation of granulation tissue, which helps in formation of healthy new tissues.

**Keywords :** acanthosis, eczema, hyperkeratosis, leech application, spongiosis

**Conference Title :** ICMMAM 2016 : International Conference on Modern Medicine and Alternative Medicine

**Conference Location :** Zurich, Switzerland

**Conference Dates :** January 12-13, 2016