

**EFFICACY OF BETAMETHASONE DIPROPIONATE
PHONOPHORESIS IN THE TREATMENT OF ATOPIC
DERMATITIS**

**Thesis
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By

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Abstract

Purpose: of the current study was to investigate the effect of Betamethasone Dipropionate Phonophoresis (BDP) in the Treatment of Atopic Dermatitis. **Subject:** Sixty patients were included in this study. Their ages ranged from 15 to 30 years. The patients were divided randomly into three groups of equal number: **Procedures:** Group (A) received 4 weeks of treatment with BDP using continuous mode for 5 min, with 1 MHz and 1.5 W/cm^2 , 3 days/ week while Group (B) treated with BDP using pulsed mode for 4 weeks, 3 days/week for 15 min per session, with 1 MHz and 1.5 W/cm^2 and Group (C) received placebo BDP for 4 weeks, 3 days/week. The measurements were done before the study and after one month of treatment for all groups by using Ultrasonography and SCORAD score. **Results:** of this study showed reduction in the thickness of skin and SCORAD score after the treatment for Group (A), (B) and (C) with a percentage of 41.8%, 39.6%, 23% respectively for the thickness of skin and 74.9%, 73.6%, 46% respectively for SCORAD. There was a highly significant difference between three groups after the treatment. It was observed that BDP using Continuous was more effective but with no significant value. **Conclusion:** It could be concluded that The combination of ultrasound and betamethasone dipropionate cream can be considered as an effective method to enhance the drug efficacy and its penetration, thus enhancing the treatment of atopic dermatitis.

Key words: Atopic dermatitis, Phonophoresis, Betamethasone Dipropionate, Continuous ultrasound, Pulsed ultrasound.

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