

EFFICACY OF ANTIFUNGAL CREAM *VERSUS* POWDER IN THE TREATMENT OF FUNGAL FOOT SKIN INFECTION AND UNPLEASANT FOOT ODOR AT MEDICAL DEPARTMENT OF THAI NAVAL RATING SCHOOL

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Abstract. Tinea pedis is a common infection among military personnel. We retrospectively reviewed the medical records of patients, clinically diagnosed with tinea pedis at the Thai naval rating school medical department during August – September 2015 to compare the efficacy of treating tinea pedis with clotrimazole cream, clotrimazole powder and a combination of boric acid and salicylic acid in a foot powder (mBS foot powder) among military personnel by evaluating clinical improvement and improvement in foot odor. Patients were followed-up at 1 and 3 months using a Total Tinea Pedis Score (TTPS) and self-assessment ordinal score for foot odor and sweat. A total of 120 subjects were included in the study. Thirty-five, 42 and 43 subjected were treated with clotrimazole cream, clotrimazole powder and mBS foot powder, respectively. All topical antifungal treatments significantly decreased the TTPS, foot odor score and sweat score at 1-month ($p<0.001$, $p<0.001$ and $p=0.039$, respectively). Regarding tinea pedis treatment at 3-month, clotrimazole powder had a significantly higher TTPS reduction than mBS foot powder ($p=0.021$). For sweat reduction, mBS foot powder had a significantly higher sweat reduction score than clotrimazole powder and clotrimazole cream. Clotrimazole cream, clotrimazole powder and mBS foot powder were all effective in treating tinea pedis, reducing sweat and foot odor. Powder preparation may be appropriate for tinea pedis in patients with hyperhidrosis or wearing occlusive foot wear.

Keywords: tinea pedis, clotrimazole powder, mBS foot powder, clotrimazole cream

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