ABSTRACT THE EFFECT OF CONVENTIONAL AND FAST MELTING TABLET OF CETIRIZINE ON TABLET HARDNESS AND FRIABILITY TEST

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Cetirizine is a non-sedative second generation antihistamine drug used in the treatment of allergic rhinitis, chronic urticaria, and atopic dermatitis. Cetirizine in fast melting preparation is an alternative to increase patient comfort, especially geriatric and pediatric patients who have difficulty swallowing. This research aims to determine the effect of conventional and fast melting tablet dosage forms on tablet characteristics including hardness and friability tests. From the evaluation results, the data obtained was then processed using the SPSS application with the Shapiro-Wilk test, Levena Test, and Mann Whitney test. Based on the research results, both dosage forms have met the requirements of the tablet hardness test. Cetirizine tablets obtained a value of 6.45 ± 0.90 kgf and Histrine FT tablets 4 kgf \pm 0,41 which has met the requirements, namely in the range of 4-8 kgf for conventional tablets and 3-5 kgf for fast melting tablets. For the tablet friability test, both dosage forms have met the requirements with the % friability of the Cetirizine tablets and Histrine FT tablets 0% which have met the requirements for the % friability of not more than 0.8%. From the statistical test results, there was a significant difference with a sig 0.001 result in the tablet hardness and friability test between Cetirizine tablets and Histrine FT tablets.

Keywords: Cetirizine, tablet, fast melting, hardness test, friability test