



AUTOIMMUNE BULLOUS DISEASES

THE ACTIGRAPHY-MEASURED NOCTURNAL WRIST MOVEMENTS AND ASSESSMENT OF SLEEP QUALITY IN PATIENTS WITH BULLOUS PEMPHIGOID: A PILOT CASE-CONTROL STUDY

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Introduction: Bullous pemphigoid (BP) is a distressing autoimmune bullous disease strongly associated with severe pruritus, however data concerning pruritus in BP are still scarce. No clinical researches evaluating the effect of BP on sleep quality have been conducted.

Objective: To evaluate the intensity of pruritus measured by nocturnal wrist movements (NWM) and the sleep quality in BP patients using actigraphy in comparison to non-itchy controls with subsequent correlations with visual analog scale for itch (VAS) as a subjective measure, disease severity (total BPDAl, urticaria/erythema, erosions/blisters BPDAl) and serum total IgE level.

Materials and Methods: Newly diagnosed 31 BP patients and 40 non-itchy controls (mean age 75.4±12.3, 73.5±11.7, respectively) were recruited. All participants wore ActiSleep+ monitor on dominant wrist.

Results: The median VAS score was 5.5 for BP patients. The median BPDAl was 43 (urticaria/erythema BPDAl was 16, erosions/blisters BPDAl was 29). The scratching defined as bouts of NWM were significantly more intensive in BP patients than in controls (p<0.0001). Characteristic of BP were the bouts corresponding with the slowest movements. There were no correlations with VAS, BPDAl and total IgE level. Compared to controls BP patients presented significant sleep disturbances determined by sleep efficiency, wake after onset and average time of awakening (p<0.0001) strongly correlated with urticaria/erythema BPDAl.

Conclusions: Pruritus measured by actigraphy is more intensive in BP patients than in





healthy people with characteristic slow movements. Actigraphy method showed very low sleep quality in BP patients. Severity of BP has a negative impact on sleep.

