



PSORIASIS

## EVALUATION OF RELATIONSHIPS BETWEEN PSORIASIS AND NEUROLOGIC DISORDER USING SEQUENTIAL PATTERN MINING

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**Introduction:** Psoriasis can be also associated with a various systemic comorbidities. Although it is still under debate, psoriasis is considered to be associated with some neurologic conditions such as migraine, headache, sleep disorder and neuropathies.

**Objective:** To identify the relationship between psoriasis and neurologic disorders in the reality through a population-based study using Sequential pattern mining (SPM).

**Materials and Methods:** We obtained population-based data recorded from 2011 to 2013 by the Health Insurance Research and Assessment Agency. The cases of psoriasis and neurologic disorders were identified using the diagnostic codes of the International Classification of Diseases 10th Revision. SPM was used to identify the comorbidities and measure the time onset of the comorbidities.

**Results:** Patients with psoriasis had a higher comorbidity of headache and migraine (comorbidity: 0.235% and 0.18%, respectively) than other neurologic disorders. Sleep disorder (comorbidity: 0.125%), mononeuropathies (comorbidity: 0.12%), transient cerebral ischemic attack (comorbidities: 0.047%) and polyneuropathies (comorbidities: 0.0008%) were also related with psoriasis. Headache, migraine, sleep disorder and mononeuropathies was diagnosed 229.3, 178.3, 148.1 and 214.7 days after the diagnosis of psoriasis, respectively.

**Conclusions:** These results suggest that it is necessary to keep in mind a possibility of neurological disorder for proper management.

**Keywords:** Psoriasis, neurologic disorder, Sequential pattern mining, epidemiology

