CHARACTERISTICS OF COMBINATION PHARMACOTHERAPY IN PATIENTS WITH DIABETIC NEUROPATHY

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Background

1. Approximately 10% of U.S. patients have painful diabetic neuropathy (DPN), which is the most common mononeuropathy complication linked to microvascular and macrovascular disease. About half of patients have pain predicted to chronic pain and develop diabetic peripheral neuropathy (DPN). DPN is associated with a variety of symptoms, including pain, paresthesia, dysesthesia, and sensory loss.

2. The prevalence of DPN in the U.S. is approximately 10%. The prevalence of DPN in the U.S. is approximately 10%.

3. The literature documents that many DPN patients are unsuccessfully treated. Neuropathic Pain Special Interest Group (Eur J Pain) for the treatment of pharmacological treatments for DPN. The Toronto Expert Panel on Diabetic Neuropathy (TEPDN) guidelines conclude that it often is insufficient to use mono- or combination pharmacotherapy in DPN patients, and recommend combination pharmacotherapy after failure of initial treatment.

4. Over 20,000 new cases of DPN are reported annually in the U.S., and these cases are expected to increase with aging and overweight population, the burden of DPN is expected to rise.

5. As diabetes becomes more prevalent in the population, the number of people with DPN is expected to increase.

Objectives

1. To assess patients' characteristics and predictors for DPN, patients receiving mono-pharmacotherapy and patients receiving combination pharmacotherapy.

Methods

Database Design

1. A patient cohort was identified with DPN using ICD-9 codes for listed DPN: 250.6x, 357.2 prior or on the index date (N=7,145 patients), 13% had prior DPN diagnosis and 87% had a new diagnosis within 12 months. The study population was restricted to patients with diabetes mellitus (ICD9 code 250 and its sub categories).

2. Patients were included if they were in the 30 days at the time of the right first DPN prescription for tripterygial injection (ICD9 code 250.6x), opioid, gabapentin, pregabalin or lidocaine.

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Results

1. The top 5 risk factors were age (65% of patients), sex (71% of patients), and diabetes complications (63% of patients).

2. Univariate analysis was used for identifying predictors of combination pharmacotherapy (time between the first and second medicine was within 30 days). If there was a gap of 60 months.

3. Logistic regression was used for identifying predictors of combination pharmacotherapy (time between the first and second medicine was within 30 days). If there was a gap of 60 months.

Conclusions

1. The top 5 risk factors were age (65% of patients), sex (71% of patients), and diabetes complications (63% of patients).

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Limitations

1. The poor characterization and the severity of diabetes were not included for as predictors, due to data limitations.

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5. Predictors with less than 0.25 significance and predictors with less than 0.25 significance and predictors with less than 0.25 significance were not considered for the study.

References


