

Evaluate the Effects of Gabapentin and Pregabalin in the Treatment of Peripheral Neuropathic Pain in the patients with Diabetes

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Abstract

Peripheral neuropathic pain is among the neurological pathologies which can be seen in the patients with diabetes. There are some medications to alleviate or treat such pathology. Gabapentin and pregabalin are among such medications which can be used for this purpose.

In this study we evaluated the effects of gabapentin and pregabalin on the peripheral neuropathic pain in the patients with diabetes and compared the results.

Keywords: Peripheral Neuropathic Pain; Diabetes; Gabapentin; Pregabalin

Introduction

Peripheral neuropathic pain is a common neurological problem in the patients with Diabetes There are some medications to treat or alleviate such problem in the patients suffering from diabetes. Among them, there are some anticonvulsants to control such problem, including gabapentin and pregabalin. In this study we evaluated and compared the effects of these medications in controlling the neuropathic pain in the patient with diabetes [1-5].

Materials and Methods

In this study we evaluated the effects of gabapentin and pregabalin in two separated groups of patients each contained 30 patients with type 2 diabetes. Each group contained 30 female patients, aged between 40 to 60 years old and under metformin therapy with average A1C level of 6.5 upwards. In one group, gabapentin was administered with average dosage from 100 mg daily upwards until controlling the patients symptoms and based on their tolerance. In another group, pregabalin was administered with average dosage from 75 mg daily upwards until controlling the patients symptoms and based on their tolerance. In the duration of 3 months we evaluated patients symptoms and the amount of pain reduction with Douleur Neuropathique 4 Questions (DN4), Neuropathic pain diagnostic questionnaire.

Results

In the duration of 3 months of treatment with gabapentin and pregabalin in each separated group, both patient groups showed decreased levels of pain and their questionnaire scores also were reduced suggesting that both treatments were effective. In the group

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that was treated with gabapentin, there were 27 patients that their questionnaire scores were lowered and their pain symptoms were reduced obviously but in the group that was treated with pregabalin, there were 22 patients which their questionnaire scores were lowered and their pain symptoms were reduced obviously.

Conclusion

According to the results of this study, both gabapentin and pregabalin are effective to treat neuropathic pain in the patients with diabetes although this study showed a relatively better effect of gabapentin in alleviating and treating the diabetic neuropathic pain.

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