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## Which anti-depressant drug should be preferred for the treatment of neuropathic pain in diabetic population?

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Currently, diabetic neuropathic pain (DNP) is symptomatically treated with antidepressants, anticonvulsants, and opioids. Recent data indicated that antidepressants can affect the blood glucose levels and disrupt the glycemic control. Therefore, clinical management of DNP using antidepressants is a dilemma in diabetic patients. Our research group has recently reported that mianserin<sup>1</sup> and agomelatine<sup>2</sup> successfully treated neuropathic pain in diabetic rats, whereas escitalopram was ineffective. However, effects of these three antidepressants on hyperglycemia were not similar. We have seen that agomelatine and escitalopram were completely ineffective on hyperglycemia, whereas mianserin has a notable antihyperglycemic effect<sup>3</sup>. Our preclinical results exhibited that escitalopram should not be preferred for the treatment of DNP. Mianserin may be a good alternative for diabetic patients for treating the pain occurring in connection with neuropathy; however clinicians should be aware of drug induced hypoglycemia. The other antidepressant, agomelatine, has a potential to treat diabetes-induced neuropathic pain without any side effect on the glycemic control. Further, implications are discussed on the basis of literature data.

### Biography

Nazli Turan is currently working on her PhD thesis at Anadolu University.

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