

Special Issue on
**Diabetic Neuropathy: New Insights to Early Diagnosis
 and Treatments**

CALL FOR PAPERS

Diabetic neuropathy is a complex disorder with multiple etiologies that affects about 50% of the diabetes population. At this time there is no known treatment. Good glycemic control slows progression of diabetic neuropathy in subjects with type 1 diabetes but seems to provide little to no benefit in subjects with type 2 diabetes. Moreover, neuropathy has been shown to develop in humans as well as animal models in stages of prediabetes/insulin resistance and in the absence of overt hyperglycemia. Given the increasing incidence of both type 1 and type 2 diabetes and obesity in the worldwide population and the impact diabetic neuropathy has on the quality of life of patients and their families, a strategy for the early diagnosis and discovery of an effective treatment is needed.

Clinical studies over the last few years have introduced determination of sensitivity and morphometry of sensory nerves in the skin and cornea as a means for early detection of diabetic neuropathy. However, applicability of these newer diagnostic tools in the clinic has not been demonstrated. Application of the more recognized approaches for diagnosing and staging diabetic neuropathy such as patient questionnaires, determining thermal and mechanical sensitivities, and examination of nerve conduction velocities also require standardization. Approximately, 30% of diabetics with neuropathy have associated pain, and management of this pain has been a challenge for clinicians. Choice of the correct drug(s), dosage, and patient management seems to be based on individual needs. Overall, diagnosis and management of diabetic neuropathy in the patient have not progressed significantly for many years and this needs to change.

Animal studies have provided an array of insight to the etiology of diabetic neuropathy. However, translation of these findings to an effective treatment for the patient has been unsuccessful. There are many factors that may account for these poor outcomes and these shortfalls need to be addressed. Therefore, continued preclinical studies are needed, perhaps using more predictive/translational endpoints and combination therapies, in order to identify an effective treatment that at minimum will slow progression or even repair nerve damage caused by prediabetes/diabetes.

For this special issue we seek clinical and preclinical studies on the diagnosis and treatment of diabetic neuropathy. We will also consider research articles as well as review articles that address the challenges and potential solutions in the diagnosis and treatment of diabetic neuropathy.

Potential topics include but are not limited to the following:

- ▶ New tools for the early diagnosis of diabetic neuropathy
- ▶ Neuropathy in prediabetes: is this the time for treatment?
- ▶ Standardization of the diagnosis of diabetic neuropathy in the clinic
- ▶ Is diabetic neuropathy different in type 1 versus type 2 diabetes?
- ▶ Risk factors for development of diabetic neuropathy in type 2 diabetes
- ▶ Management of diabetic neuropathy in the patient: pain and prognosis
- ▶ Challenges of translation of preclinical studies to the bed side
- ▶ Animal models, new and old, for the study of diabetic neuropathy
- ▶ New etiologies/mechanisms of diabetic neuropathy
- ▶ Potential new treatments, clinical or preclinical, for diabetic neuropathy
- ▶ Diabetic neuropathy and foot ulcers
- ▶ Exercise and diabetic neuropathy: can life style changes improve outcome?
- ▶ Diabetic neuropathy in youth
- ▶ Diabetic neuropathy and the risk of falling in the elderly
- ▶ Can a drug to treat diabetic neuropathy ever gain approval in the current regulatory landscape?

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jdr/dndt/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 27 July 2018

Publication Date

December 2018