Anxiety and depression in small fiber neuropathy

Aysun Damci MD^{1,2}, Koen R.J Schruers MD, PhD^{1,3}, Carsten Leue, MD, PhD^{1,3}, Karin G. Faber MD, PhD^{1,2}, Janneke G.J. Hoeijmakers MD, PhD^{1,2},

¹MHeNS, School for Mental Health and Neuroscience, Maastricht University, The Netherlands, ²Department of Neurology, Maastricht University Medical Center+, Maastricht, The Netherlands, ³Department of Psychiatry and Neuropsychology, Maastricht University Medical Center+, Maastricht, The Netherlands.

Psychiatric comorbidity is common in patients with chronic pain (1). In peripheral neuropathic pain patients, particularly anxiety and mood disorders are frequently present and associated with a high level of catastrophizing (2-4). Small fiber neuropathy (SFN) is a peripheral neuropathy characterized by chronic neuropathic pain. In 47% of SFN patients, an underlying somatic condition is present (5). The quality of life of SFN patients is severely reduced in comparison with healthy individuals, and can be attributed to both physical and mental factors (6). However, studies about the specific mental health status of SFN patients are scarce.

The Maastricht University Medical Center+ is a tertiary referral center in the Netherlands for patients suspected of SFN. Since 2009 all patients are evaluated in a standardized day case setting. This has led to a large cohort of SFN patients, with data on demographics, medical history, diagnostic tests (e.g. intraepidermal nerve fiber density (IENFD), quantitative sensory testing and laboratory tests) and the results of various validated questionnaires about pain (visual analogue pain scale, neuropathic pain scale), SFN-specific symptoms, daily functioning and mental health. The Hospital Anxiety and Depression Scale (HADS) is used to identify signs of anxiety and depression and the Pain Catastrophizing Scale (PCS) is taken to measure the degree of catastrophizing in the patients diagnosed with SFN.

The aim of this study is to describe the prevalence of anxiety and depression in a large cohort of SFN patients and to search for associated factors, including demographics, pain intensity and duration, other SFN-related symptoms, the presence of underlying somatic and psychiatric conditions and the level of catastrophizing with an abnormal IENFD. The results will be presented.

Keywords: small fiber neuropathy, chronic pain, anxiety disorder, depression

References

1. Cherif F, Zouari HG, Cherif W, Hadded M, Cheour M, Damak R. Depression Prevalence in Neuropathic Pain and Its Impact on the Quality of Life. Pain Res Manag. 2020;2020:7408508.

2. Jensen M, Chodroff MJ, Dworkin RH. The impact of neuropathic pain on healthrelated quality of life: review and implications. Neurology 2007;68(15):1178-82.

3. Evans S, Banerjee S, Leese M, Huxley P. The impact of mental illness on quality of life: A comparison of severe mental illness, common mental disorder and healthy population samples. Qual Life Res. 2007;16(1):17-29.

Pereira FG, Franca MH, Paiva MCA, Andrade LH, Viana MC. Prevalence and clinical profile of chronic pain and its association with mental disorders. Rev Saude Publica. 2017;51:96.

5. de Greef BTA, Hoeijmakers JGJ, Gorissen-Brouwers CML, Geerts M, Faber CG, Merkies ISJ. Associated conditions in small fiber neuropathy - a large cohort study and review of the literature. Eur J Neurol. 2018;25(2):348-55.

6. Bakkers M, Faber CG, Hoeijmakers JG, Lauria G, Merkies IS. Small fibers, large impact: quality of life in small-fiber neuropathy. Muscle Nerve. 2014;49(3):329-36.