IS AN EASY AND RELIABLE DIAGNOSIS OF LOCALIZED NEUROPATHIC PAIN (LNP) POSSIBLE IN GENERAL PRACTICE?

DEVELOPMENT OF A SCREENING TOOL

Gerard Mick, 
Center for Pain Evaluation and Treatment, Neurological Hospital, Lyon, France
Ralf Baron, 
Division of Neurological Pain Research and Therapy, Department of Neurology, University Hospital Schleswig-Holstein, Kiel, Germany
Gerardo Correa, 
Department of Rehabilitation, Hospital del Trabajador, Santiago de Chile, Chile
Ingrid Tacken, 
Grünenthal GmbH, Aachen, Germany; Guy Hans, 
Multidisciplinary Pain Center, Antwerp University Hospital, Edegem, Belgium
Víctor Mayoral, 
Universidad de Niza, Hospital Universitario de Bellvitge, Barcelona, Spain

BACKGROUND
Neuropathic pain (NP) affects 26 million people worldwide but only 40 – 60% of patients achieve adequate pain relief. NP has a negative impact on QoL of patients. 60% of NP patients present with localized symptoms. Screening tools (DN4 / painDETECT / LANSS4) are used depending on the countries, but NP remains frequently under-diagnosed and misdiagnosed, and an easy and reliable tool for screening localized NP (LNP) patients is missing.

RESULTS
A screening tool for diagnosing LNP proposed by international experts was tested by general practitioners (GPs) in Badalona (Spain) from Nov’12 until Mar’13, and validated against pain specialist diagnosis as reference (Badalona Municipal Hospital). Grading system principles proposed for NP by the IASP were basis for development, focusing on medical history and distribution of painful symptoms and sensory signs. The proposed screening tool is shown in Figure 1. Primary outcome was the usefulness of the screening tool rated by GPs. Additionally GPs were asked if the tool facilitates daily practice. Positive predictive value (PPV) and negative predictive value (NPV) were calculated.

METHODS

2079 patients (Age: 60.7 ± 11.1years; female = 69.9%) with chronic pain were consecutively screened by 31 GPs. LNP was diagnosed in 394 patients. Screening, including patient examination, took 7 minutes (mean). GPs rated the tool as useful (24/31) or very useful (7/31) (Figure 2) and facilitating practice (30/31) (Figure 3). PPV / NPV were 41% / 89% and very predictive as exclusion for indication.

DISCUSSION
LNP is a frequent disease but often under-and misdiagnosed. An easy and reliable tool for screening LNP by GPs is proposed, that can facilitate targeted treatment.

The screening tool narrowly adheres to the NP algorithm proposed for NP diagnosis by the IASP, as a first use of its basic principles in a population of chronic pain patients at the GP level. The spectrum of disease, a highly relevant bias in diagnostic studies through currently used screening tools, is not biased in the present real-life study. In this respect, the diagnostic accuracy of the tool appears realistic.