Using the Quebec Task Force Classification to subgroup low back pain patients in primary care: an analysis of longitudinal clinical data from chiropractic and general practice

Lisbeth Hartvigsen

Authors (lastname, firstname) and employer
Lisbeth Hartvigsen[1*], Lise Hestbaek[1,2], Charlotte Lebouef-Yde[3], Werner Vach[4], Alice Kongsted [1,2]

[1]Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark
[2]Nordic Institute of Chiropractic and Clinical Biomechanics, Odense, Denmark
[3]Research Department, Spine Center of Southern Denmark, Hospital Lillebælt, Middelfart, Denmark
[4]Center for Medical Biometry and Medical Informatics, Medical Center – University of Freiburg, Germany

Background
Low back pain (LBP) patients with related leg pain and signs of nerve root involvement (NRI) are considered to have a worse prognosis than patients with LBP alone. However, it is unclear whether leg pain location above or below the knee and the presence of neurological signs are important in primary care patients.

Aim
The aim of this study was to explore whether the four Quebec Task Force categories (QTFC) based on the location of pain and on neurological signs have different characteristics at the time of care seeking, whether these QTFC are associated with outcome, and if so whether there is a hierarchy of the four QTFC on the severity of outcomes.

Method
Adult patients seeking care for LBP in chiropractic practice or general practice were classified into the four QTFC based on self-reported information and clinical findings. Analyses were performed to test the associations between QTFC and baseline characteristics as well as the outcomes of general perceived effect and activity limitation after 2 weeks, 3 months, and 1 year and 1-year latent class derived trajectories of LBP intensity.

Results
The study comprised 1271 patients; 947 from chiropractic practice and 324 from general practice. QTFC were statistically significantly associated with most of the baseline characteristics, with activity limitation at all follow-up time points, with general perceived effect at 2 weeks but not 3 months and 1 year, and with 3 out of 5 LBP trajectories in at least one of the settings. Severity of clinical outcomes increased from LBP alone, across LBP + leg pain above the knee and below the knee to LBP + NRI. However, the variation within QTFC was considerable.

Conclusion
The QTFC identify different LBP subgroups at baseline and there is a consistent hierarchy of outcomes for the four categories. The differences between outcomes are large enough for the QTFC to be useful for clinicians in the communication with patients. However, due to variation of outcomes within each category individuals' outcome cannot be precisely predicted from the QTFC alone. It warrants further investigation if the QTFC can improve prediction tools and guide treatment decisions.