

A study of Questionnaire Development for Back Pain in Korean patients

가천대학교 길병원 류마티스내과¹, 가천대학교 길병원 신경외과²

최효진¹, 고윤혁¹, 서미령¹, 류희정¹, 안용², 백한주¹

Background/Aims: To evaluate Korean version of questionnaire for inflammatory (IBP) and mechanical back pain (MBP).

Methods: Questionnaire was composed of ten items. It was made by rheumatologists and spine specialist in our hospital, based on five established criteria of IBP and three of MBP criteria. Patients with back pain who visited our rheumatology clinic or spine center were enrolled in this study. The data were collected prospectively from September 2018 through December 2018. All patients were older than 18 years and had back pain which was approved by physician. The questions included sites of pain, age at onset, character, duration and aggravating/relieving factors of pain, trauma history, radicular/buttock pain, and peripheral symptoms.

Results: Two hundred fourteen patients (IBP patients n=111, MBP patients n=103) were enrolled in this study. 67.3% were male (86.6% of IBP, 47.6% of MBP, $p < 0.001$). The mean of age was 52.4 years (IBP vs. MBP, 44.2 years vs. 61.1 years, $p < 0.001$), of disease duration was 12.9 months (14.3 months vs. 11.4 months, $p < 0.001$). Body mass index was no different between two groups (24.9 vs. 24.0, $p=0.223$). There was significant difference in the item of ‘upper back pain’ (33.3% vs 16.5%; $p=0.005$). ‘Morning stiffness and pain’ (74.8% vs 44.7%; $p<0.001$), ‘improving with exercise’ (69.4% vs 22.3%; $p<0.001$), and ‘improving after intake of nonsteroidal anti-inflammatory drugs (NSAIDs)’ (61.3% vs. 20.4%, $p<0.001$) were also higher in the IBP group than the MBP group as expected. ‘Improving with lumbar lateral flexion’ and ‘alternating buttock pain’ were higher in the IBP group (18.9% vs 8.7%, $p=0.043$, 47.7% vs. 31.1%, $p=0.013$, respectively). Interestingly there was no difference in the items ‘pain at night, duration of morning stiffness, or awakening because of back pain during night’ which was reported as characteristics of IBP in previous studies.

Conclusions: We found seven items were specific to the patients with IBP in Korea; upper back pain, onset at younger age, morning stiffness and pain, improving with activity/NSAIDs/lumbar lateral flexion, and alternating buttock pain. Now we are planning for further large cohort study for validation.

