The Short-form Inguinal Pain Questionnaire (sf-IPQ): an instrument for rating groin pain after inguinal hernia surgery in clinical daily practice

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Background: The Inguinal Pain Questionnaire (IPQ) is a standardized and validated instrument for assessing persisting pain after groin hernia surgery. The IPQ is often perceived as being too extensive for routine use. The aim of this study was to develop and evaluate a condensed version of the IPQ in order to facilitate its use in daily clinical practice.

Methods: The condensed form, i.e. The Short-Form Inguinal Pain Questionnaire (sf-IPQ) comprises two main items taken from the IPQ. Four hundred patients were recruited from the Swedish Hernia Register and were sent the IPQ, sf-IPQ and the Short-Form McGill Pain Questionnaire (SF-MPQ) three years after hernia repair. Ratings from the IPQ and the sf-IPQ were converted to a 12-point scale. The reported scores for two shared items in the IPQ and sf-IPQ were compared using the Intraclass Correlation Coefficient (ICC), Cohen’s kappa and McNemar’s test.

Results: After two reminders, the response rate was 69.8% (n=279/400). The ICC for the IPQ and sf-IPQ scores was 0.78 (95% confidence interval 0.73-0.82, p<0.001). Cohens kappa was 0.66 (95% confidence interval 0.55-0.77, p<0.001). The sf-IPQ systematically indicated a higher pain score than the IPQ (p=0.013) calculated with McNemar’s test.

Conclusions: Despite the systematic difference in level of pain scored, correlation, consistency and agreement was seen between the IPQ and sf-IPQ. The forms appear to be interchangeable, though the sf-IPQ may be a more sensitive instrument. The condensed structure of the sf-IPQ is more user-friendly and shows promise as a useful tool in daily clinical practice.

The original IPQ was developed and validated 2007 and consists of seven-step items to assess pain and interference with daily activities. The original IPQ includes in total 18 questions on four pages and takes approximately 15 minutes to complete.

The two most clinically relevant items were extracted from the IPQ to render a short-form IPQ (1. Worst pain last week, score 0-6. 2. Activities limited by pain, score 0-6). Total score range 0-12.

IPQ-score ≥3 is considered as pain interfering with daily activities. Statistical analysis presented Sf-IPQ as a valid and disease-specific instrument interchangeable to IPQ, despite that Sf-IPQ seems to be a more sensitive instrument.

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