Clinical Research: Peripheral Nerve

A Validation of the Tarlov Cyst Quality-of-Life Survey in Men Surgically Treated for Symptomatic Spinal Tarlov Cysts

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Abstract

BACKGROUND AND OBJECTIVES:

Health-related quality-of-life (HRQoL) surveys have been used to assess general quality of life in many areas of medicine including neurosurgery. Disease-specific quality-of-life surveys can be used to more accurately describe nuances of disease progression or improvement. The Tarlov Cyst Quality-of-Life (TCQoL) scale is a disease-specific HRQoL scale that has been validated in women who were surgically treated for symptomatic spinal Tarlov cysts. The purpose of this article was to validate the TCQoL in male patients who underwent surgical treatment of symptomatic Tarlov cysts.

METHODS:

Male patients who underwent surgical treatment of Tarlov cysts in our clinic between 2016 and 2023 were surveyed preoperatively and 3 months postoperative. Surveys included established and validated Oswestry Disability Index (ODI), and the Short Form-36 (SF-36) and the disease-specific TCQoL. Psychometric analyses to assess internal consistency, discriminative validity, sensitivity to clinical change, and construct validity were performed to validate the TCQoL using the ODI and SF-36.

RESULTS:

Our sample consisted of 46 male patients surgically treated for Tarlov cysts and completed preoperative and postoperative surveys including the 11-item TCQoL. Internal consistency was good, Cronbach α = 0.85. Nine of the 11 items showed significant improvement at follow-up demonstrating the discriminative ability of the scale. The TCQoL significantly correlated with the ODI ($P < .001$) and the following subscales of the SF-36: physical function ($P < .001$), bodily pain ($P = .010$), vitality ($P = .011$), and social functioning ($P = .008$), suggesting concurrent validity.

CONCLUSION:

We validated the TCQoL as a disease-specific HRQoL measure that can be used with male patients who undergo surgical treatment for sacral Tarlov cysts. Our validation demonstrates good internal validity and discriminative validity, is sensitive to clinical change, and has strong construct validity.