Psychological Status Is Associated With Symptom Severity in Patients With Carpal Tunnel Syndrome

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Introduction

Psychological status in CTS

- It is important to determine the interaction between symptoms and functional disability and psychological status
- Previous studies emphasized the role of psychological factors to the symptoms and functional disability of CTS patients, not opposite direction

Purpose

- The purpose of our study was to evaluate whether the psychological status in patients with CTS is associated with the symptom severity and functional disability of CTS

Patients and Methods

Patient characteristics

- Prospective cohort design
- Between May 2012 and May 2014

Total of 72 patients were surgically treated for CTS

- Mean patient age was 53 years
- 53 of the 60 patients (88.3%) were women

Assessment of CTS symptoms & functional disability

- Boston Carpal Tunnel Questionnaire (BCTQ) was used to assess symptoms and functional disability

Assessment of psychological status

- The Center for Epidemiologic Studies Depression Scale (CES-D) & Pain Anxiety Symptoms Scale (PASS) were used to assess the symptoms of depression and pain anxiety

Center for Epidemiologic studies Depression Scale (CES-D)

- Average score for the general population has been reported as 9.1±8.6
- A score of 16 is widely used as a predictive cutoff for estimating the prevalence of a major depressive disorder

Pain Anxiety Symptoms Scale (PASS)

(1) cognitive anxiety (2) fear of pain (3) escape and avoidance (4) Physiological anxiety

Statistical analyses

- Paired t test : Change of Scores between Pre/Postoperative 3 Months After CTR

Bivariate & Multivariable Linear Regression Analysis for Predictors of the Preoperative CES-D / PASS scores

- Pearson correlation coefficients: Relationships between Pre/Postoperative BCTQ-S/BCTQ-F scores and CES-D/PASS scores
- Bi/Multivariable linear regression analysis: Independent variable: Demographic characteristics
- Dependent variable: CES-D and PASS scores

BCTQ-S, BCTQ-F, CES-D, PASS

- All outcome scores significantly improved 3 months after CTR

Results

- Significantly correlated:
  - Preop CES-D & PASS with preop BCTQ-S
  - Postop CES-D & PASS with postop BCTQ-S
- Relationship between pre/postoperative BCTQ-S & CES-D/PASS

Conclusion

- Our findings indicate the depression and pain anxiety of CTS patients are associated with the symptom severity of CTS