Conclusion: The Achilles tendon is the most frequent location of tendinopathy associated with FQ, being affected in 95% of cases. The risk factors associated to an increased risk to develop FQ-associated ATR includes age over 60 years, male gender, chronic treatment with CS and organ transplantation, all these being present in our cases. Despite being a relatively frequent adverse event, it is underdiagnosed and the risk of ATR is not usually assessed when indicating FQ treatment. It is important to perform a risk/benefit assessment, specially in patients with associated risk factors, because most ruptures are complete and require surgical treatment, and may be a potential cause of disability.

REFERENCES:

Disclosure of Interests: None declared

THU0490 PREDICTORS OF CHRONIC PAIN RELIEF BY FIXED-SITE HIGH-FREQUENCY TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION

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Background: Fixed-site high-frequency transcutaneous electrical nerve stimulation (FS-TENS) is a form of TENS in which the stimulator is designed for a predetermined location rather than for co-localization with the patient’s pain. Previous studies in individuals with chronic pain have demonstrated the efficacy and real-world effectiveness of a small wearable FS-TENS device designed for localized application to a single placement site to ensure comfort while both active and sleeping. Results demonstrated that 50-80% of FS-TENS users with chronic lower extremity or low back pain experience clinically meaningful pain relief,1,2 and daily use of the device was associated with greater pain relief relative to intermittent use.3

Objectives: To determine predictors of a positive FS-TENS response.

Methods: This retrospective, observational study evaluated users of a FS-TENS device to treat chronic pain over a 10-week period. The device and companion smartphone app collected dosage data, demographics, pain characteristics, and pain ratings and all data were stored in a cloud database. The primary study outcome was the baseline to week 10 change in composite pain (average of pain intensity and pain interference with sleep, activity, and mood). Device users were included if they provided demographic data, pain characteristics indicative of chronic pain, and baseline and week 10 pain ratings. Participants were defined as a responder or comparator based on their change in composite pain (responder: ≥15% decrease; comparator: ≥15% increase). Stepwise forward probit regression was used to determine independent predictors.

Results: There were 451 responders and 263 comparators. Independent predictors (Table) that were associated with greater response to FS-TENS included age, baseline composite pain, adherence/utilization rate (defined as the percentage of days with at least 30 minutes of stimulation), and stimulation intensity (defined as the ratio of therapeutic stimulation to sensation threshold, expressed in decibels). Negative predictors (associated with lower response) included history of headache/migraine and diabetes. The area under the receiver operating characteristic curve was 0.76 (95% confidence interval, 0.72–0.79).

Conclusion: FS-TENS effectiveness is predicted from baseline pain characteristics and dosage variables, such as frequency/regularity of use and stimulation intensity, with moderate accuracy.

REFERENCE:

Abstract THU0490 – Table 1. Independent predictors of responders from probit regression.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
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<tbody>
<tr>
<td>Age (years)</td>
<td>0.01</td>
</tr>
<tr>
<td>Baseline composite pain (0–10)</td>
<td>0.27</td>
</tr>
<tr>
<td>Headache or migraine</td>
<td>0.37</td>
</tr>
</tbody>
</table>
Background: The Istanbul Low Back Pain Disability Index in lumbar radiculopathy.

Methods: Patients who were diagnosed with radioculopathy due to lumbar spinal stenosis and/or disc herniation by physical examination and imaging methods were included in the study. Data about age, sex, body mass index (BMI), disease duration (month) were noted. Short Form 36 (SF-36) was used to assess the quality of life. Disability due to low back pain was assessed with Oswestry Low Back Disability Questionnaire. The severity of low back pain and extremity pain due to radiculopathy were assessed on the Visual Analogue Scale (VAS).

The reliability of ILBPDI was determined by internal consistency (Cronbach’s alpha coefficient). The construct validity (convergent and divergent validities) was evaluated. The correlations of the ILBPDI with SF-36, Oswestry Low Back Disability Questionnaire, and the VAS scores of the low back pain and radiculopathy were assessed for convergent validity. The relations of the ILBPDI with age, BMI, and disease duration were assessed for divergent validity. The construct validity of the ILBPDI scale was determined by Spearman’s correlation coefficient. The descriptive analysis was done for demographic data. P<0.05 accepted as significant. SPSS 20.0 (Statistical package for social sciences for Windows 20.0) program was used for the statistical analysis.

Results: The mean age of 82 patients (44 female, 38 male) with lumbar radiculopathy was 45.45 (SD: 11.96) years. The median (min-max) duration of disease was 5 (1-120) months. The mean BMI of patients was 29.09 (SD: 5.04). The mean score of ILBPDI was 30.73 (SD: 17.04) and the mean score of Oswestry Low Back Disability Questionnaire was 52.73 (SD: 16.98).

The Cronbach’s alpha coefficient of the ILBPDI for internal consistency was 0.764. The ILBPDI score had moderate and significant positive correlations with Oswestry Low Back Disability Questionnaire (rho: 0.815, p<0.001); statistically significant but low correlation was detected between ILBPDI and the VAS score of radioculopathy (rho: 0.285, p: 0.010), and there was no correlation with the VAS score of low back pain (p>0.05). As for the correlations between the ILBPDI total score and SF-36 subgroups, significant negative correlations were detected with physical functioning (rho: -0.672, p<0.005), physical role limitation (rho: -0.230, p: 0.038), bodily pain (rho: -0.546, p<0.005), general health (rho: -0.262, p: 0.017), and social function (rho: -0.337, p<0.005) subgroups of the SF-36. There were no significant correlations between ILBPDI and age, disease duration, and BMI (p>0.05).

Conclusion: The Istanbul Low Back Pain Disability Index is a valid and reliable instrument in patients with lumbar radiculopathy. This is a preliminary study. The study will continue for the factor analysis.

REFERENCE: