scientific emphasis is the trigger point (TrP). TrP is defined as hyperirritable areas within taut bands of skeletal muscle and classified as either active or latent. Although many protocols have been proposed for use in the treatment of TrP, there has been no study investigating which method is more effective.

Objectives: The aim of our study is to compare the different trigger point techniques used in the treatment of low back pain.

Methods: 28 cases with low back pain with trigger point origin were included in the study. The subjects were randomly divided into 3 groups, Strain-Counter Strain (SCS) technique was applied to Group 1 (n=16), Integrated Neuromuscular Inhibition Technique (INIT) for Group 2 (n=16), and Ischaemic Compression Technique (ICT) for Group 3 (n=16). The duration of treatment was a maximum of 6 weeks (12 sessions) in both three groups. Visual Analogue Scale (VAS) was used for pain severity, algometer examination was used to measure pain threshold, and Oswestry Disability Index was used to assess disability score. In addition, the Beck Depression Scale was used to assess the psychosocial status of the cases, and the STAI (State Trait Anxiety Inventory)-I and STAI-II scales were used to assess emotion-state and continuity. The evaluations were made before the treatment, after the 1st session of the treatment and at the end of the treatment (after 6 weeks). The data were analysed by using Kruskal-Wallis Test.

Results: Mean age and body mass index (BMI) of our study group were, respectively, 38.6±12.3 years and 26.6±6.2 kg/m² in the SCS group, 34.2±10.1 years and 26.3±5.9 kg/m² in the INIT group and 34.8±14.2 years and 24.5±5.2 kg/m² in the ICT group. There was no significant difference among groups in respect of age, BMI, depression and anxiety score (p>0.05) before the treatment. Three groups had significantly decreases in pain according to the VAS and algometer (p<0.05). The ROM values and function level significantly improved within three groups after treatment (p<0.05). There was no statistically significant difference in pain (p=0.13), lumbar flexion (p=0.77), lumbar extension ROM (p=0.43) and disability score (p=0.65) among the three groups before and after the treatment.

Conclusions: The results indicate that patients with low back pain gain clinically benefit from trigger point treatment on pain, ROM and function. Therefore, we suggest that physiotherapist either can apply SCS, INIT or ICT based on their clinical experience in the management of low back pain. This work was supported by Istanbul University, Scientific Research Projects (Number: TYL-2017–24209)

Disclosure of Interest: None declared


THU0532 TO ASSESS WHETHER THERE IS AN ASSOCIATION BETWEEN HYPERMOBILITY AND SPORTS INJURY
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Background: Joint Hypermobility (JH) is an extremely heritable condition in which joints have a range of motion beyond normal limits. This is frequently seen in healthy individuals. 1 It is important to differentiate this from Joint Hypermobility Syndrome (JHS). 2 JH is diagnosed as a Beighton score of four or more. 3

Objectives: The objective of this project was to determine whether there is an association between hypermobility and sports injury.

Methods: A quantitative observational approach using a cross sectional survey was adopted. A pilot study and initial focus group was arranged, involving 10 university students. Individuals were identified as hypermobile or not using the Beighton score. All participants were asked to complete two questionnaires: the first asking demographic information; the second questionnaire was injury specific. Fisher’s exact test was used for statistical analysis.

Results: A total of 114 individuals participated in the study. 62 were women and 52 men. 26% of participants were found to be hypermobile. There was no significant association between hypermobility and sports injury (p=0.6596). There was a significant increase in joint and ligament sprain amongst the non-hypermobile (NH) group covering all sports studied (p=0.0289). Results showed that joint dislocation was found exclusively amongst hypermobile individuals. Duration of injury in hypermobile individuals was higher then NH. The use of oral painkillers or anti-inflammatories in the semi professional group was greater then the general population. The use of anti-inflammatory medications in the semi professional group was greater then the general population.

Table 1 Prevalence of hypermobility in each sport

<table>
<thead>
<tr>
<th>Sport</th>
<th>Total Respondents</th>
<th>H</th>
<th>MI</th>
<th>NH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running</td>
<td>18</td>
<td>16</td>
<td>2</td>
<td>30.8</td>
</tr>
<tr>
<td>Football</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Cycling</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Squash</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Running</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rugby</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td>13.5</td>
</tr>
<tr>
<td>Hockey</td>
<td>18</td>
<td>17</td>
<td>1</td>
<td>31.6</td>
</tr>
<tr>
<td>Tennis</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td>28.6</td>
</tr>
<tr>
<td>Netball</td>
<td>17</td>
<td>17</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>80</td>
<td>10</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Conclusions: Hypermobility is relatively common amongst individuals and there is a lot of anecdotal evidence associating it with increased rates of injuries. This project finds that NH individuals are more likely to sustain a ligament or joint sprain in sports. This is thought to be due to increased joint laxity and flexibility preventing injury.

REFERENCES:

Disclosure of Interest: None declared


THU0533 PREVALENCE OF LOW BACK PAIN AND KINESIOPHOBIA IN ELDERLY RESIDENTS OF SAO PAULO CITY: A CROSS-SECTIONAL PRELIMINARY DATA
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Background: Low back pain (LBP) is an important health problem around the world associated with disability, high costs for the health system and work absenteeism. A recent systematic review estimated that in Brazil, the joint prevalence of LBP in the elderly is 25%, superior to knee osteoarthritis and rheumatoid arthritis, being considered one of the most relevant health conditions in the elderly.

Objectives: To measure the prevalence of LBP and kinesiophobia in the elderly, following the existing guidelines on conducting specific prevalence studies about LBP and to investigate the factors associated.

Methods: This is a cross-sectional study and the total sample to be recruited is 5/13 individuals of both genders, over 60 years old. Pain was investigated at two different times: current and last year, and pain intensity was measured by Numerical Pain Rating Scale (NPRS). Disability was measured using the Roland Morris Disability Questionnaire – Brazil version (RMDQ - BRA) and kinesiophobia was measured by the Tampa Scale for Kinesiophobia (TSK).

Results: Until now, 387 elderly were interviewed, of which 77% were women and the mean age was 71.98 (±7.70). The prevalence of LBP was 76.23%, with a punctual prevalence of 72.54% and a 12 months prevalence of 93.22%. The mean NPRS score was 7.52 (±2.16), the mean RMDQ - BRA score was 11.32 (±5.35), and the mean of the TSK score was 43.78 (±7.50).

Conclusions: Preliminary data indicate that the prevalence of LBP and kinesiophobia are high in this population. However, the level of functional disability due is moderate. There are few studies that approach these symptoms in the elderly population, and will serve as the basis for the creation of health policies.

REFERENCES:

Disclosure of Interest: None declared


THU0534 THE EFFECT OF LUMBER STABILISATION EXERCISE ON THE BALANCE AND CLINICAL HEALTH
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Objectives: The aim of this study is to investigate the effects of lumbar stabilisation exercises on chronic low back pain in term of pain, functioning, quality of life, balance and trophic improvement of lumbar multifidus muscles.

References:

Disclosure of Interest: None declared