Physical Activity Predicts Kinesiophobia at Return to Play for Athletes with Persistent Post-Concussion Symptoms

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Table 1. | PPCS (n=18) | No PPCS (n=23) | P-value |
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<tbody>
<tr>
<td>Sex (female)</td>
<td>9 (50%)</td>
<td>11 (48%)</td>
<td>0.89</td>
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<td>Age (years)</td>
<td>14.5 (2.0)</td>
<td>14.9 (1.8)</td>
<td>0.54</td>
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<td>Symptom resolution (days)</td>
<td>57.3 (23.9)</td>
<td>15.2 (7.1)</td>
<td>&lt;0.001</td>
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<td>RTP clearance (days)</td>
<td>66.8 (25.6)</td>
<td>21.7 (9.1)</td>
<td>&lt;0.001</td>
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Results

PPCS Group
- Significant and moderate correlations between TSK change and step count (r = -0.6, p<0.008) and exercise frequency (r = -0.63, p=0.005)
- Non-significant and weak correlations between TSK change and exercise duration (rho = -0.12, p=0.65)

No PPCS Group
- Non-significant and weak correlations between TSK change and step count (r = -0.18, p=0.41), frequency (r = -0.34, p=0.12), and duration (rho = 0.10, p=0.67)

Conclusions

Regular PA during concussion recovery, regardless of intensity may help reduce kinesiophobia in those with PPCS.
The PPCS group had higher TSK scores at initial and RTP visits.
- Those with PPCS may be particularly vulnerable to kinesiophobia.
- PA appears to have a beneficial effect for kinesiophobia reduction among those with PPCS.

Acknowledgement
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