Results Overall, boys had significantly higher valgus KFM values than girls across both data collections (P=0.001). Also, a significant interaction between sex and age was observed, where girls and boys demonstrated respectively an increase and decrease in the valgus KFM values from pre-adolescence to adolescence age (13.8% increase vs. 10.6% decrease; P=0.001).

Conclusion The remarkable increase of KFM in adolescent athlete girls may, in part, play a role in their risk of ACL injury, although future studies need to assess the relationship between this increase and rate of ACL injuries.

Introduction

Despite recent literature recommending increased focus on psychological aspects of rehabilitation, injured athletes often do not return to sport despite having reached physical readiness. The aim of this study was to explore the lived experiences of patients undergoing treatment for knee injury according to either the novel Motor Imagery to Facilitate Sensorimotor Re-learning (MOTIFS) training model, which integrates psychological training into physical rehabilitation, or care-as-usual.

Materials and Methods

This phenomenological interview study identified major and subordinate themes encompassing the lived experiences of rehabilitation of 5 patients undergoing MOTIFS training and 7 receiving care-as-usual.

Results

Results indicated that patients in the MOTIFS group perceived increased focus on individualized and activity-relevant meaning during rehabilitation training. This included concrete strategies to influence psychological outcomes, and identifying an explicit biopsychosocial interaction in which confidence, motivation, and enjoyment encouraged both physical and psychological readiness to return to sport.

Patients in the care-as-usual group perceived focus on physical aspects of training. The complexity of the biopsychosocial interaction was not articulated, though the lack of structured psychological training strategies was perceived to have a negative influence on feeling psychologically ready to return to sport.

Conclusion Those in the MOTIFS group described this novel training model as focusing on understanding and providing strategies for coping with psychological factors in rehabilitation and subsequent return to sport. The care-as-usual group perceived a need for more focus on improving psychological well-being. Future research should focus on methods of improving both physical and psychological readiness to return to sport.

Introduction

Proximal Hamstring Avulsion (PHA) is a rare injury and happens with hyperextended knee and flexed hip.

Materials and Methods

The aim of the study was to investigate the effect of surgical and conservative treatment of PHA.

Patients with MRI-verified PHA were included and had either surgery or training. At baseline, 6 and 12 months follow-up, all patients answered Perth Hamstring Assessment Tool (PHAT), Hip Sports Activity Scale (HSAS), overall-health Visual Analog scale and had their knee flexion strength measured at 30 degrees using handheld dynamometer.

Results

13 patients had surgery (mean age 51±15, 46% females, 15 days after injury) and 13 patients had training (mean age 50±17, 46% females, 64 days after injury). In the surgical group, the median PHAT score increased from 41 to 70 to 82 (p<0.001), their overall health: 50 to 80 to 80 (p=0.025) and their HSAS: 0 to 3 to 3 (p<0.01). In the training group, the PHAT score increased from 51 to 68 to 77 (p<0.001). Overall health improved from 69 to 75 to 80 (p=0.025), while HSAS went from 0 to 1 to 1 (p<0.01). Median knee strength improved in the surgical group from 0.22 to 0.67 to 1.07 Nm/kg (<0.001) and in the training group from 0.24 to 0.44 to 0.48 Nm/kg (p<0.001).

Conclusion At 12 months follow-up, both groups improved PHAT and overall health. However, the surgical group improved more in knee flexion strength and were able to participate in sports at a higher level than the training group.

Introduction

Half of young women start combined hormonal contraceptive (CHC) use for non-contraceptive reasons including ‘controlling’ their menstrual cycle to prevent injuries. These decisions should be evidence-based. This study assessed the association between CHC use and musculoskeletal tissue pathophysiology, injuries, or conditions.