

# 吊り輪動作再獲得に難渋した男子体操選手 — 肩甲骨周囲筋機能不全の一症例 —

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## 【要旨】

男子体操選手における肩関節脱臼術後の吊り輪競技復帰に向けたリハビリテーションを検証した。検証作業として倒立・懸垂動作及び吊り輪動作における肩甲骨周囲筋群(僧帽筋各線維・前鋸筋)の動作筋電図を施行した。得られた筋電図波形から倒立と懸垂動作課題において健側との比較を行った。対象者は懸垂及び吊り輪動作において患側の肩甲骨挙上・内転筋(僧帽筋上部・中部線維)と下制筋(僧帽筋下部線維・前鋸筋)の筋活動に漸増・漸減パターンが認められなかった。リハビリテーションとして肩甲骨挙上・内転筋と下制筋の筋活動に漸増・漸減パターンを再獲得する目的として、重錘を持たせた側臥位での肩関節外転・内転運動を行った。運動療法後、吊り輪動作が可能となり、運動療法前・後における吊り輪動作の筋活動パターンに改善を認めた。

体操競技復帰を目指したリハビリテーションでは筋力強化に加えて肩甲骨周囲筋の円滑な筋活動パターンの再獲得を行う運動療法が必要である。

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## **Rehabilitation for dysfunction of the muscles surrounding the scapula: Male gymnast with difficulty in regaining the movements needed for still rings exercises**

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## 【Abstract】

The present study describes the rehabilitation of a male gymnast who aimed at

returning to still rings events after surgery for a dislocated shoulder. Examination of the gymnast included motion electromyogram of the muscles surrounding his scapula (the trapezius and serratus anterior muscles) during the movements involved in hanging handstands and still rings exercises. The wave forms obtained from the electromyograms on the affected side were compared with those from the unaffected side.

No pattern of gradual increase or decrease was observed for his adductor muscles (the upper and middle fibers of the trapezius muscle) or abductor muscles (the lower fibers of the trapezius and serratus anterior muscles) during hang and still rings movements. He then did exercises in order to regain the pattern of gradual increase or decrease of the adductor and abductor muscles, such as abductor and adductor motions of the shoulder joint while holding a weight in a lateral position. After doing this exercise, the gymnast became able to perform the still rings exercises. When his performance before and after the rehabilitation exercises was compared, an improvement in the motion pattern of his muscles during the still rings movements was found.

These results suggest that the rehabilitation of gymnasts who aim to return to the still rings after an operation for a dislocated shoulder may require them to regain a smooth pattern of motion of the muscles surrounding the scapula, in addition to strengthening those muscles.