Isolated Subacute Compartment Syndrome of the
M. Supraspinatus in a young, healthy Patient

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Background
Compartment Syndrome is a feared complication after acute soft tissue trauma. Though there have only been very few reports on isolated compartment syndrome of the rotator cuff, we present a case with unilateral, isolated, subacute compartment syndrome of the supraspinatus muscle in a young male adult after newly implemented body weight exercise.

Case Report
The patient admitted himself to our emergency room with strong, persistent pain to the right shoulder and total loss of ROM after a first body weight fitness session the day before. There was no prior trauma to said shoulder in the medical history of this otherwise healthy patient. Due to persistent pain, we kept the patient under surveillance for one day.

The unusual clinical presentation of the symptoms led to some delay in finding the correct diagnosis, which was ultimately confirmed by the Arthro-MRI (Figures 1&2) showing distinct edema and severe swelling of the supraspinatus muscle. The subsequent operative fasciotomy resulted in a complete remission of pain and muscular damage. In the postoperative follow up the Patient showed a return of regular function and ROM to a vast extent with some specific limitations. In addition, the radiographic follow up (Figures 3&4) indicated a complete remission of the preoperative pathologies, showing no remaining edema and no muscular atrophy.

Conclusion
We conclude that not only is there limited knowledge about isolated compartment syndrome to the shoulder, but also anamnestic and clinical variability can prove challenging to reach the right diagnosis. We suggest the early use of radiographic imaging to secure diagnosis in cases where clinical features might not seem apparent.