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Abstract

Background: Athlete was a 21-year-old NAIA football athlete with multiple upper extremity injuries throughout his high school and college playing career. Athlete height was 185 cm and weighed 118kg. In the spring athlete fractured his scaphoid by diving for a ball while playing football. Following surgery, rehabilitation was not properly implemented, as a result he has limited ROM in his right wrist. Athlete is limited in flexion, extension and ulnar deviation. He is within normal limits in radial deviation. With the limited ROM in flexion it caused a mass in his elbow. MMT for flexion is a 2/5, extension is a 2/5, ulnar deviation is a 2/5 and radial deviation is a 5/5. **Differential Diagnosis:** Wrist: Fracture and Wrist Sprain. **Treatment:** Athlete was diagnosed with a scaphoid fracture of his wrist. As a result of an incompetent rehabilitation at the time of injury, the athlete started to develop a flexor mass. Rehabilitation treatment on the flexor mass consisted of manual therapy and pain control, utilizing conventional methods such as electrical stimulation, cryo and thermo therapies. Athlete has continued treatment and rehabilitation and is responding well to the treatment. Objective girth measurement of the flexor mass prior to the initiation of treatment and to date demonstrated and overall reduction in size. Further treatment has included ultrasound at 3mhz at a 20% duty cycle at 1.0 watts for 7 minutes. Athlete participates with an elbow brace for practice and games. **Uniqueness:** Athlete's wrist fracture was in a shape of a circle which is quite remarkable in its self. Without the proper rehabilitation the wrist lost some ROM causing his wrist flexor mass in his right elbow. Athlete cannot flex his wrist or do any other ROM enough to get rid of the mass in his elbow. He has full ROM in radial deviation. The mass is causing a lot of issues making it hard for him to fully use his arm to the best of his ability. **Conclusion:** This case highlighted the diagnosis and treatment of an athlete suffering from complication due to injuries and not having proper rehabilitation. The case further highlighted the different treatment that were done to help the athlete. This case also talked about the different outcomes when proper rehab techniques are not applied to an injury. This case talked about a scaphoid wrist fracture, which is common among athletes. What is uncommon is that the rehabilitation was not performed correctly causing the athlete to have pain and complications in the right forearm. The athlete is still playing but it is difficult for him to play like he did before the injuries. AT staff is still working on athlete to get him back to what he was before.

Introduction

Athlete was a 21-year-old NAIA football athlete with multiple upper extremity injuries throughout his high school and college playing career. Athlete was 185 cm tall and weighed 118kg. During the spring, athlete fractured his scaphoid by diving for a ball while playing football. Following surgery, rehabilitation was not properly implemented, as a result he presented with limited ROM in his right wrist. Athlete was limited in flexion, extension and ulnar deviation. He presented within normal limits in radial deviation. With the limited ROM in flexion it resulted in a mass in his elbow. MMT for flexion was a 2/5, extension is a 2/5, ulnar deviation is a 2/5 and radial deviation is a 5/5.

Purpose

One of the domains of Athletic Training is rehabilitation. In this case report, the athlete was not performing his rehabilitation and ultimately ended up developing a mass in the arm causing him to have a reduction in range of motion in the wrist.

Clinical Evaluation

The athlete reported to the Athletic Training room to report his injury to his forearm. Upon further evaluation it was noted that the athlete had limited range of motion in all ranges except for radial deviation. Examination also found a palpable mass in the wrist flexors.

Differential Diagnosis:

- Wrist Fracture
- Wrist Sprain

Treatment

Athlete was diagnosed with a scaphoid fracture of his wrist. As a result of an incomplete rehabilitation at the time of injury, the athlete started to develop a flexor mass. Rehabilitation treatment on the flexor mass consisted of manual therapy and pain control, utilizing conventional methods such as electrical stimulation, cryo and thermo therapies. Athlete has continued treatment and rehabilitation and is responding well to the treatment. Objective girth measurement of the flexor mass prior to the initiation of treatment and to date demonstrated and overall reduction in size. Further treatment has included ultrasound at 3mhz at a 20% duty cycle at 1.0 watts for 7 minutes. Athlete participates with an elbow brace for practice and games.

Uniqueness

Athlete's wrist fracture was in a shape of a circle which is quite remarkable in its self. Without the proper rehabilitation the wrist lost some ROM causing his wrist flexor mass in his right elbow. Athlete cannot flex his wrist or do any other ROM enough to get rid of the mass in his elbow. He has full ROM in radial deviation. The mass was causing several issues making it hard for him to fully use his arm in sport participation and activities of daily living.

Conclusion

This case highlighted the diagnosis and treatment of an athlete suffering from complication due to injuries and not having proper rehabilitation. The case further highlighted the different treatment options that were completed to assist the athlete. This case also discussed the different outcomes when proper rehabilitation techniques are not applied to an injury. This case examined a scaphoid wrist fracture, which is common among athletes. What is uncommon is that the rehabilitation was not performed correctly causing the athlete to have pain and complications in the right forearm. The athlete was still participating but it was difficult for him to be at his competitive level prior to injury. AT staff is still working on athlete to get him back to what he was before.

