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Abstract

This case reports presented a 19 year-old male collegiate football athlete with delayed onset concussion symptoms. The injury occurred during football practice. Following the injury the athletic trainer took the athlete in for an evaluation. The athletic trainer found no evidence to diagnose the athlete with a concussion after passing all concussion tests. Days later the athlete went down and presented with heat illness symptoms, he was sent to the emergency room and the doctor diagnosed him with a concussion.

Introduction

In this case report, the athlete was participating in practice and hit his head on the ground during a play. Immediate treatment was administered to the athlete and completed and passed every concussion assessment that was given to him. Three days later the athlete was hospitalized after going down during practice and was submerged in an ice bath and was hospitalized on suspicion of heat illness and concussion symptoms. Athlete started his return to play concussion protocol as soon as he reported asymptomatic

Purpose

The purpose of this case report was to demonstrate a common issue seen in athletics. This case was also to show the similarities in symptoms between a concussion and exertional heat illness.

Background

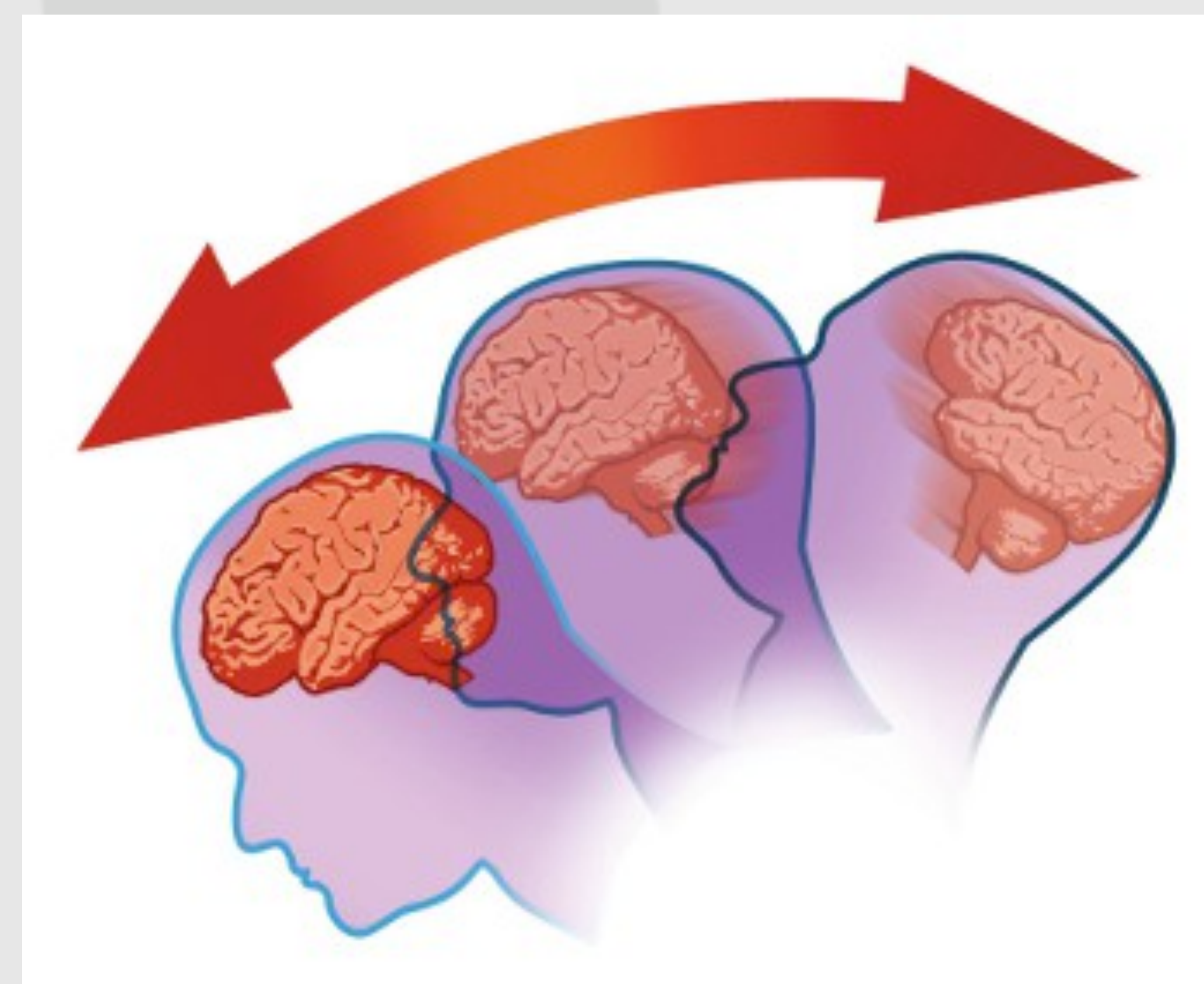
- 19-year old male
- Sophomore collegiate football; Defensive Back
- History of Concussions

Differential Diagnosis

- Concussion
- Exertional Heat Illness
- Sickle Cell Anemia
- Diabetic Shock

Clinical Evaluation

- Cranial Nerve Assessment WNL
- Vestibular/Ocular-Motor Screening WNL
 - Maddox Questions WNL
 - SCAT 5 WNL
- Headache rated 2/10



Treatment

A symptom evaluation sheet, SCAT 5, cranial nerve screening was conducted at the time of the head injury. The athlete passed all evaluations and was cleared of a concussion. Three days following the injury, the athlete presented with possible heat related illness symptoms. The athletic training staff submerged him in a cold whirlpool and dialed 911. The athlete was released by the hospital and they diagnosed him with a concussion. Three days after the hospital visit the athlete was still symptomatic but continued to show improvement, at this time he was progressed to be at team meetings and attend classes. The next day he stated to have no symptoms, took the baseline test and was ready to start his return to play protocol. The athlete had no symptoms while performing each phase to the return to play protocol. Two months later the athlete had told the athletic training staff that he has been continuing to receive headaches but had quit the team weeks later.

Implications

It is estimated that 1.6 to 3.8 million sports related concussions occur each year. Football appears to have the highest in concussion occurrence but studies have varied. Symptoms of concussions include reduced cognitive functions, dizziness, fatigue, headache, mood changes, sensitivity to light and noise and many more. Athletes with a history of concussions reported a greater number of symptoms associated with exertional heat illness than those without a history of a concussion. Exertional heat illness symptoms include fatigue, headache, muscle cramps, dizziness, nausea, and loss of coordination. With these symptoms studies have shown relationship between concussion and exertional heat illness symptoms.

Conclusion

This case highlighted an athlete's possibility of receiving heat illness symptoms while being concussed due to the brain regions that regulate the autonomic nervous system. The challenge associated with this case was the athlete coming forward with having symptoms months later having beliefs that he may not have been honest during his return to play protocol.

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