

A Descriptive Analysis of Adherence to Established Guidelines by Florida Physicians Managing Concussions in Youth Athletes

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Which Medical Specialties Are Treating Concussed Youth Athletes?

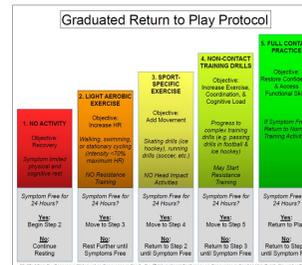
Medical Specialties	Total Number of Respondents (%)	Diagnosing/Managing Physicians (%)	Clearing Physicians (%)
Emergency Medicine	179 (28.1%)	159 (35.6%)	33 (13.6%)
Family Medicine	153 (24.1%)	95 (21.3%)	80 (32.9%)
Pediatrics	147 (23.1%)	109 (24.4%)	67 (27.6%)
Neurology	57 (9.0%)	37 (8.3%)	30 (12.3%)
Orthopaedics	40 (6.3%)	21 (4.7%)	16 (6.6%)
Other	60 (9.4%)	26 (5.8%)	17 (7.0%)
Total	636 (100.0%)	447 (100.0%)	243 (100.0%)

What Modalities Do Physicians Use When Treating Concussed Youth Athletes?

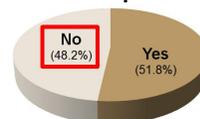
Diagnosis/Management Modalities	Physicians w/ >30 Patients (%)	Clearing Physicians (%)
Grading Scale (%)	24 (31.6%)	122 (50.2%)
Physical Sx (%)	74 (97.4%)	228 (93.8%)
Neuropsych (%)	31 (40.8%)	116 (47.7%)
Neuroimaging (%)	29 (38.2%)	90 (37.0%)
No Guidelines (%)	18 (23.7%)	30 (12.3%)

Which Return to Play Protocol Do Physicians Prescribe to Symptom-Free Concussed Youth Athletes?

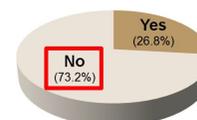
RTP Recommendation	Clearing Physicians (%)
Light Aerobic Exercise	114 (46.9%)
Sport-Specific Exercise	79 (32.5%)
Non-Contact Training Drills	40 (16.5%)
Full Contact Practice	2 (0.8%)
Return to Play	8 (3.3%)
Total	243 (100.0%)



Do you feel adequately trained to prescribe RTP concussion protocol?



Are Physicians Aware of a Youth Concussion Law?



Results

Of the 388 respondent physicians that actively manage youth concussions in Florida, 94 (24.2%) of them reported not using any published guidelines or set of criteria to guide their clinical management and return to play protocol clearance of the concussed youth athletes. Additionally, 187 (48.2%) of the 388 physicians managing concussed youth athletes reported not feeling as though they have adequate training to prescribe a return to play protocol for a concussed youth athlete.

Conclusions

This study demonstrated that the implementation of recent legislation on concussion management does not translate into improved patient care. Inadequate management of concussed youth athletes has the potential to lead to greater incidence of second impact syndrome and neurosurgical emergencies.

References

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Introduction

In 2012, Florida passed legislation, in attempts to protect concussed youth athletes from second impact syndrome, requiring physician clearance for return to play. Studies have shown the majority of physicians clearing concussed youth athletes for return to play include physicians from the specialties of pediatrics, emergency medicine, family medicine, neurology, and orthopaedics. Because of evolving research on concussion management and return to play protocol, it is vital that physicians clearing concussed youth athletes to return to play follow published guidelines. This study aimed to determine whether Florida physicians in the previously mentioned specialties adhere to published guidelines during their concussion management and return to play clearance protocol for youth athletes.

Learning Objectives

- Demonstrate that a subset of physicians managing concussed youth athletes in Florida are not using any published guidelines or established set of criteria to guide their management and return to play protocol clearance.
- Demonstrate that many physicians managing concussed youth athletes feel inadequately trained to prescribe a return to play protocol for concussed youth athletes.
- Demonstrate that regardless of medical specialty or experience, many physicians managing concussions feel unequipped to clear youth athletes for return to play.

Methods

This cross-sectional study utilized a 22-question, researcher-developed survey, which was sent to active physicians board-certified by the Florida Board of Medicine practicing in pediatrics, emergency medicine, family medicine, neurology, and orthopedics. The survey determined the physician management and return to play clearance protocol given to concussed youth athletes. Survey results were reported as frequencies and percentages, and were compared between medical specialties and physician experience.