Symptom recovery time under the ocular domain for concussion: a systematic review

Cody Brunclik ATC, AEMT, DO '26¹, Jones, Jillian, DPT, CBIS²

¹Des Moines University, College of Osteopathic Medicine, Des Moines, IA ²Des Moines University, Physical Therapy Department, Des Moines, IA

<u>Background-</u> The objective of this literature review was to investigate normative timeframes of symptom resolution under the ocular domain of concussion.

<u>Methods-</u> An electronic search was conducted in 3 databases (Scopus, Google Scholar, and PubMed). Search results were restricted to the last 6 years and utilized a combined list of terms related to concussion and ocular domain symptoms. A hand search was performed for relevant citations on all included articles. A total of 7 studies met the inclusion criteria and reported outcome measures. Included in these 7 studies were 987 number of participants. All searches were conducted between May 30, 2023 and July 13, 2023.

<u>Results-</u> Results of each study were reported in mean and/or median recovery times. A range of medians was reported in the data, as well as a range of means. Overall, the results showed a median recovery time of ocular concussion symptoms at finding a range of 8 to 150 days depending on the symptom and the study. A range of means was reported as well, finding a range of means from 9.4-40.8 days, with an average of the means calculated to 21.1 days.

Conclusion- Symptoms within the ocular domain typically resolved within 40 days. Additionally, a pattern was observed in recovery times when looking at age and the days to therapeutic intervention. Patients under the age of 18 had longer recovery times compared to their over 18 counterparts. Patients who had therapeutic interventions started <30 post-injury recovered faster than those who did not.