

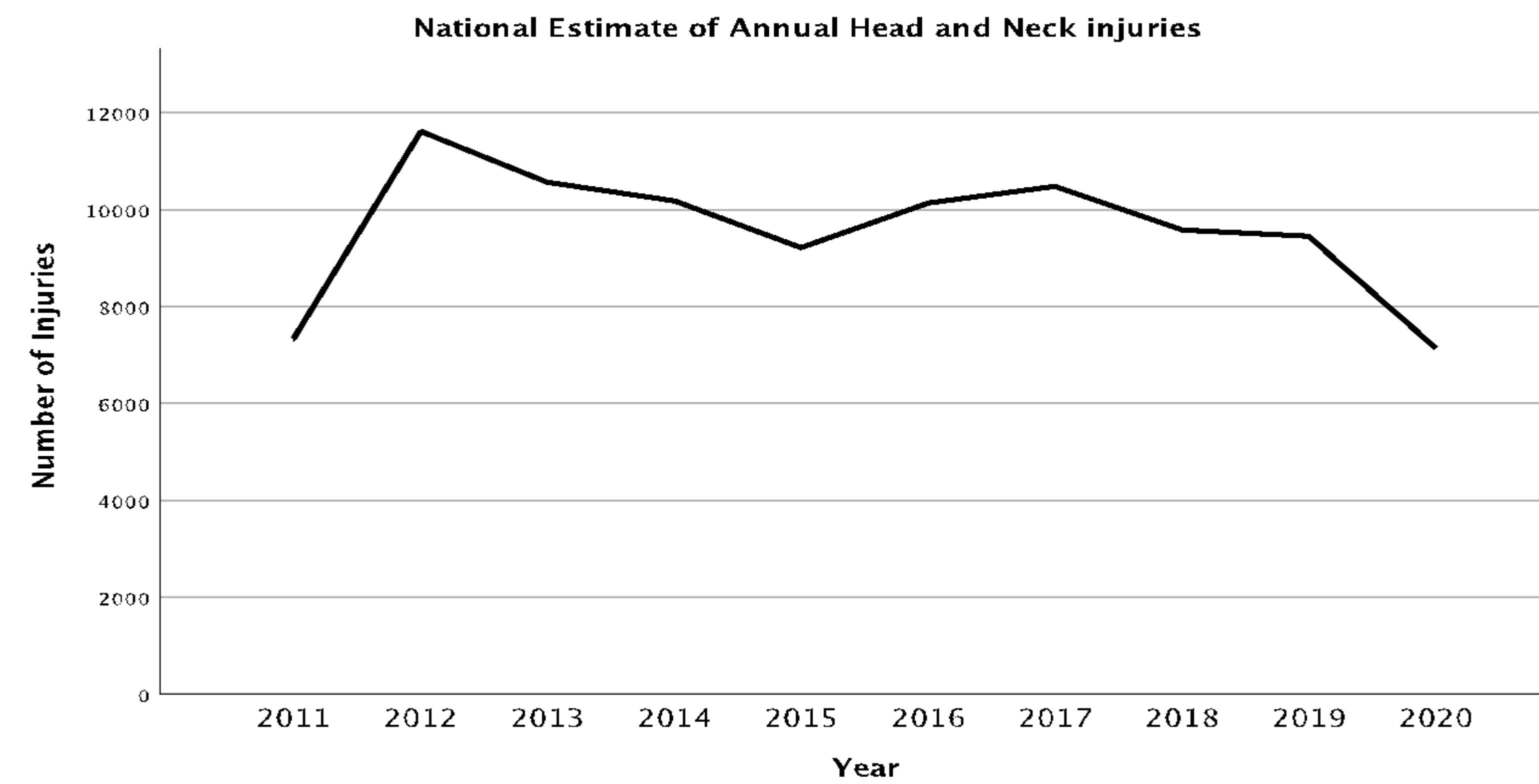


Head and Neck Injuries During Weightlifting: A NEISS Database Study

Prashant Saini BS, Harry Nanthakumar BS, Brandon Shaver MD, Daniel A. Benito MD, Punam Thakkar MD, Joseph Goodman MD

Background

- Weightlifting and other forms of resistance training have been on the rise in America for the last 10 years.
- Head and neck injuries from weightlifting commonly present to the ED and include cervical strain/sprain/trauma, facial fractures, TBI/concussions, lacerations, and more.

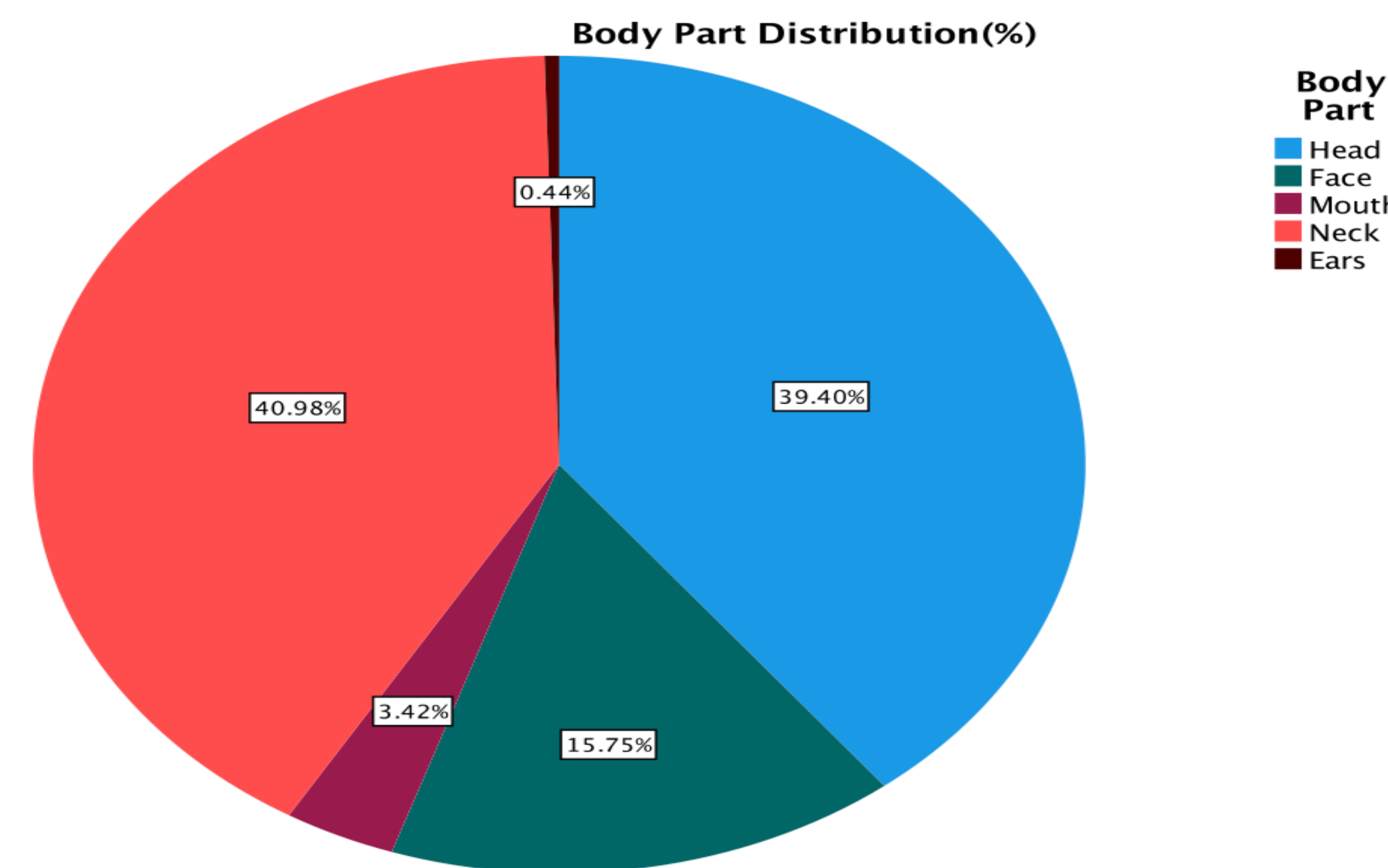


Results

- The average age of injury was 30.09(SD=15). The age group with the highest frequency of injuries was the 19-30 year old group (32.21%) followed by the 31-50 year old group(26.60%).
- A chi-square analysis comparison between body part injured and disposition resulted in a significant result (P = .006). Post-hoc testing reveals that head injuries were the most likely to be associated with hospitalization (AR=3.8) and extended observation (AR=2.9) in all age groups.

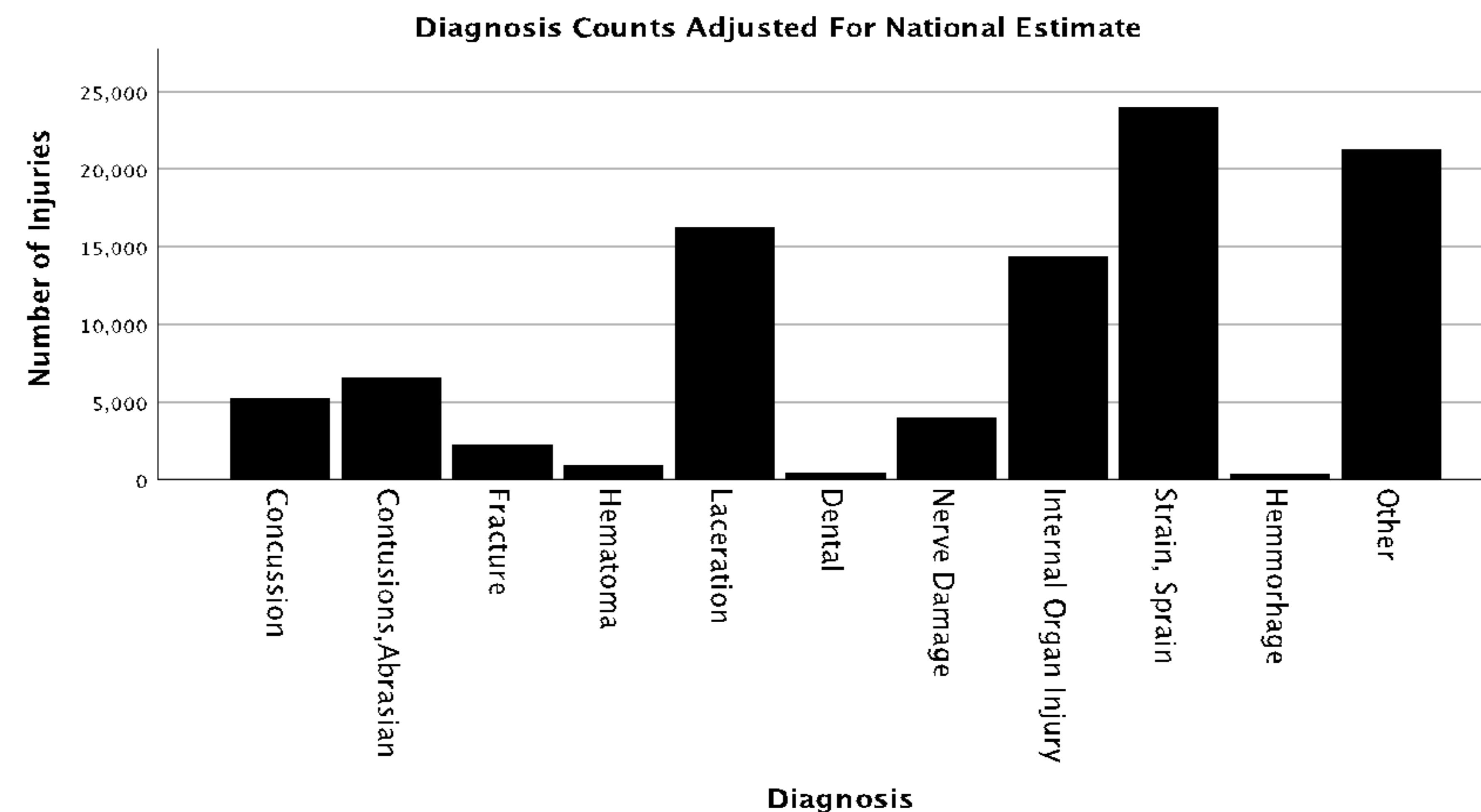
Objective

- To look at head and neck weightlifting injuries over a period of ten years using the NEISS database to help physicians, specifically otolaryngologists, identify epidemiologic trends and develop recommendations to reduce risk of injury.



Methods

- The National Electronic Injury Surveillance System (NEISS) database was queried for weightlifting injuries to the head, face, mouth, neck, and ear from the years 2011-2020.
- Demographics, injury characteristics, and disposition data was reviewed. Data analysis was done using chi-square analysis and Post-Hoc testing using Adjusted Residuals



Conclusion

- Otolaryngologists across the country should also be aware of the risks associated with weightlifting and counsel patients appropriately.

References:

- The IHRSA Global Report. The International Health Racquet & Sportsclub Association. 2019.
- Centers for Disease Control and Prevention (CDC). Trends in strength training--United States, 1998-2004. MMWR Morb Mortal Wkly Rep. 2006 Jul 21;55(28):769-72. PMID: 16855525.