

# Comparison of Scapular Dyskinesis presentations in athletes of different sports: A Meta-analysis

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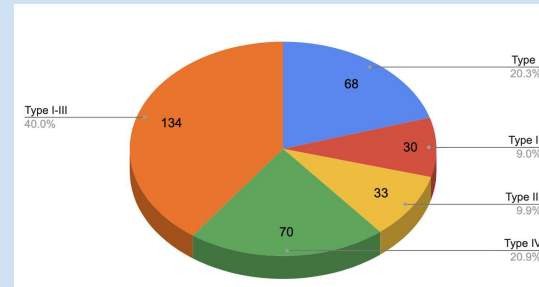
## Introduction

- Scapular Dyskinesis (SD) is a kinematic abnormality referring to alterations in scapular position at rest or during movement. There are 4 types of SD.
- We attempt to correlate different types of SD to a particular overhead sport.

## Methods

- 515 potential studies related to SD were identified.
- Studies not including overhead athletes, an established patient population, and the type of SD were excluded.
- 4 overhead sports were identified: Rugby, Swimming, Tennis, and Volleyball
- A total of 260 patients were included in the analysis, with the ages ranging between 12 - 27.9 years.

## Presentation and prevalence of scapular dyskinesia varies by the overhead sport



Pie chart displaying SD distribution across studies investigated

## Results

- A combination of Type I-III dyskinesia represents 40% of the study population and was the most common SD overall.
- Type I SD represent 20.3% of the total study population and was the most common singular-dyskinesia amongst athletes.
- Type IV SD was more common in rugby players, and type II scapular dyskinesia was more common in swimmers.

## Conclusion

- Higher prevalence of type IV SD in rugby players and type II SD in swimmers.
- Strain on rhomboids and trapezius muscles in a swimmer's motion could explain a higher frequency of type II SD.
- Identifying the type of sport-specific SD can help guide preventative exercises, guide physical therapy and aid early diagnosis.