

# Pickleball Related Orthopaedic Injury Presentations to a Large Urban Healthcare System from 2015 to 2024

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## INTRODUCTION:

Pickleball is the most rapidly growing sport in the United States. While prior studies have outlined certain aspects of these injuries in relation to the healthcare system, no study to date has analyzed the injury burden on a single large urban healthcare system. We hypothesized that the incidence of pickleball related injuries and presentations to all clinical settings in a single healthcare system, including the emergency department, urgent care, and outpatient clinic, increased significantly over a ten-year period.

## METHODS:

Deep6 artificial intelligence software was used to identify patients using keywords encompassing the gamut of pickleball injuries presenting to the emergency department, urgent care, or outpatient clinic between 2015 and 2024. Charts were retrospectively reviewed, and data was collected regarding patient demographics, injury characteristics, and diagnosis and treatment information.

## RESULTS:

There were 545 patients presenting during the study period. The mean age was 58.66 years with 62% of the study population aged 50-69 years old, the mean BMI was 25.46, and 51% of patients were female. The incidence of pickleball injuries continued to increase significantly, with a 386% increase in injuries from 2022 to 2023, and another increase in 2024. Initial encounters were most common in an orthopaedic outpatient clinic at 71%. The most common diagnoses associated with a pickleball injury in this study were exacerbation of osteoarthritis (16%), meniscus tear (11%), wrist fracture (5.7%), Achilles rupture (5.5%), and epicondylitis (5.1%). Achilles repair (22 patients) and partial meniscectomy (21 patients) were the most common surgeries performed in this study.

## DISCUSSION AND CONCLUSION:

Prior studies have either isolated presentations to the emergency department, been low in sample size, or focus on a particular injury or body part. To date, no study has analyzed pickleball injury presentations to all clinical settings within a single healthcare system. This study reports all pickleball related injuries that required medical attention at our large urban healthcare system. This is the first study to note that 71% of patients present in the outpatient orthopaedic clinic setting, demonstrating that prior studies that isolate the ED exclude the vast majority of patients with pickleball injuries. This study is also the first to report the most common injuries and surgeries performed as a result of pickleball related pathology.

