# CAPITELLAR OSTEOCHONDRITIS DISSECANS LESION CHARACTERISTICS AND INITIAL TREATMENT PATHS: A BASELINE DESCRIPTIVE EPIDEMIOLOGY STUDY FROM THE ROCKET PROSPECTIVE COHORT

### **ROCKET Research Study Group**

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#### Introduction

Capitellar osteochondritis dissecans (OCD) lesions occur in 2 per 100,000 persons aged 6 to 19 years, making it challenging for clinician scientists to study this condition.

The ROCKET study group was developed to prospectively collect clinical and patient-reported data from multiple centers as a means of comprehensively studying this disease and developing evidence-based treatment algorithms.

The purpose of this study was to describe patient characteristics, presenting clinical signs and symptoms, radiographic appearance, and initial treatment recommendations of patients initially enrolled between 2016 and 2024

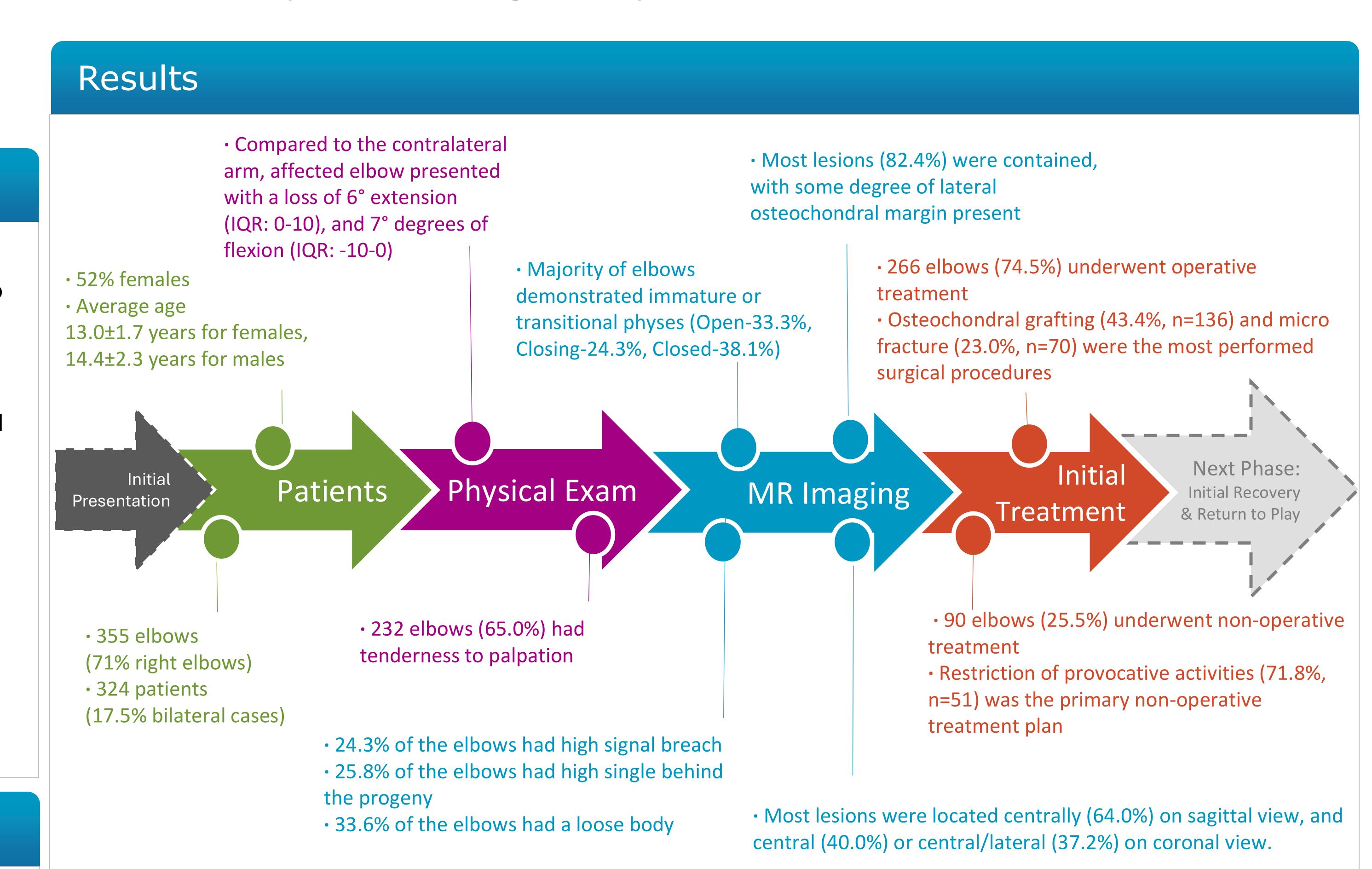
## Methods

This descriptive epidemiology study queried patients prospectively enrolled from January 2016 through April 2024 by 18 surgeons from 9 institutions across the United States.

- Eligible patients had a diagnosed capitellar OCD lesion of the elbow confirmed by magnetic resonance (MR) imaging or radiographs (XR).
- Patients were considered ineligible for enrollment into the cohort if (1) the patient was non-English speaking, or (2) there was a concurrent elbow condition present that was unrelated to the OCD lesion (i.e. distal humeral fracture).

Physical examination, radiographic, and initial treatment data were obtained from the baseline appointment.

Descriptive statistics were completed for all outcomes of interest.



# Participating Institutions



















#### Conclusion

This study presents baseline data from a diverse pediatric and adolescent patient population with a broad geographical representation.

A progeny was observed in 70.4%(n=235) of lesions

Notably, over 60% of elbows demonstrated mechanical symptoms or radiographic evidence of advanced lesion characteristics, such as articular surface breaches or loose bodies.

Despite many patients presenting without prior treatment, the majority were recommended for operative intervention at initial evaluation, with osteochondral grafting being the most common surgical procedure.

These findings highlight the burden of capitellar OCD lesions among young athletes and underscore the need for ongoing longitudinal evaluations to guide management strategies.