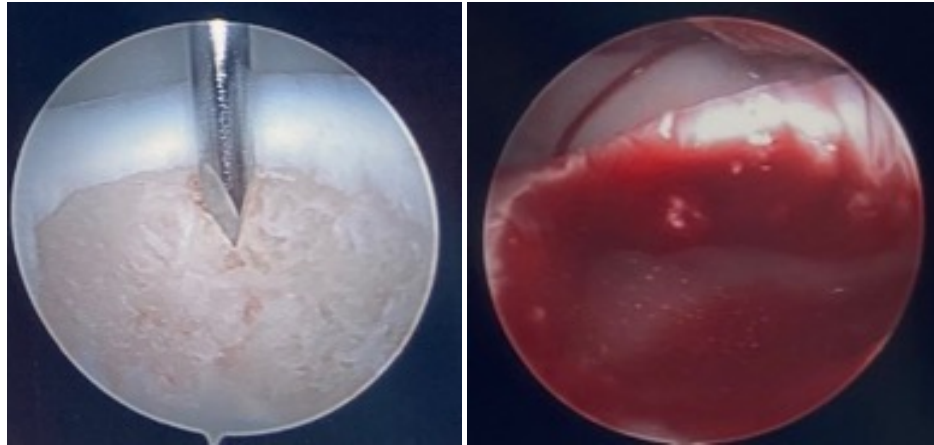


Elbow Capitellum OCD

Osteochondritis Dissecans

Marrow Stimulation (Drilling)



What is OCD?

Injury to the bone (capitellum) that supports the cartilage

- Due to **loss of blood supply** from repetitive load-bearing trauma (e.g. tumbling/throwing)
- Correlation with low Vitamin D

Risk for disruption of overlying cartilage and loose bodies

May result in **premature arthritis**



What if no surgery?

Will not heal

Persistent **pain**

Locking/catching

Increased arthritis

Loss of motion

Poor long-term function

Decreased return to sport



Elbow Arthroscopy

Outpatient surgery

General anesthesia

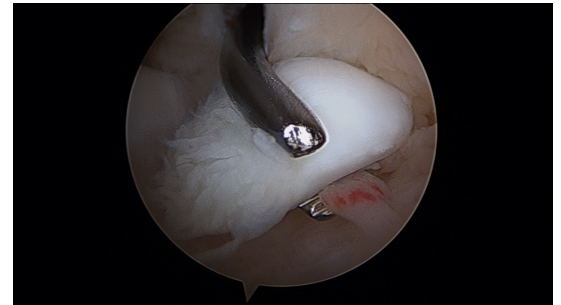
Small incisions around elbow

Remove any loose bodies

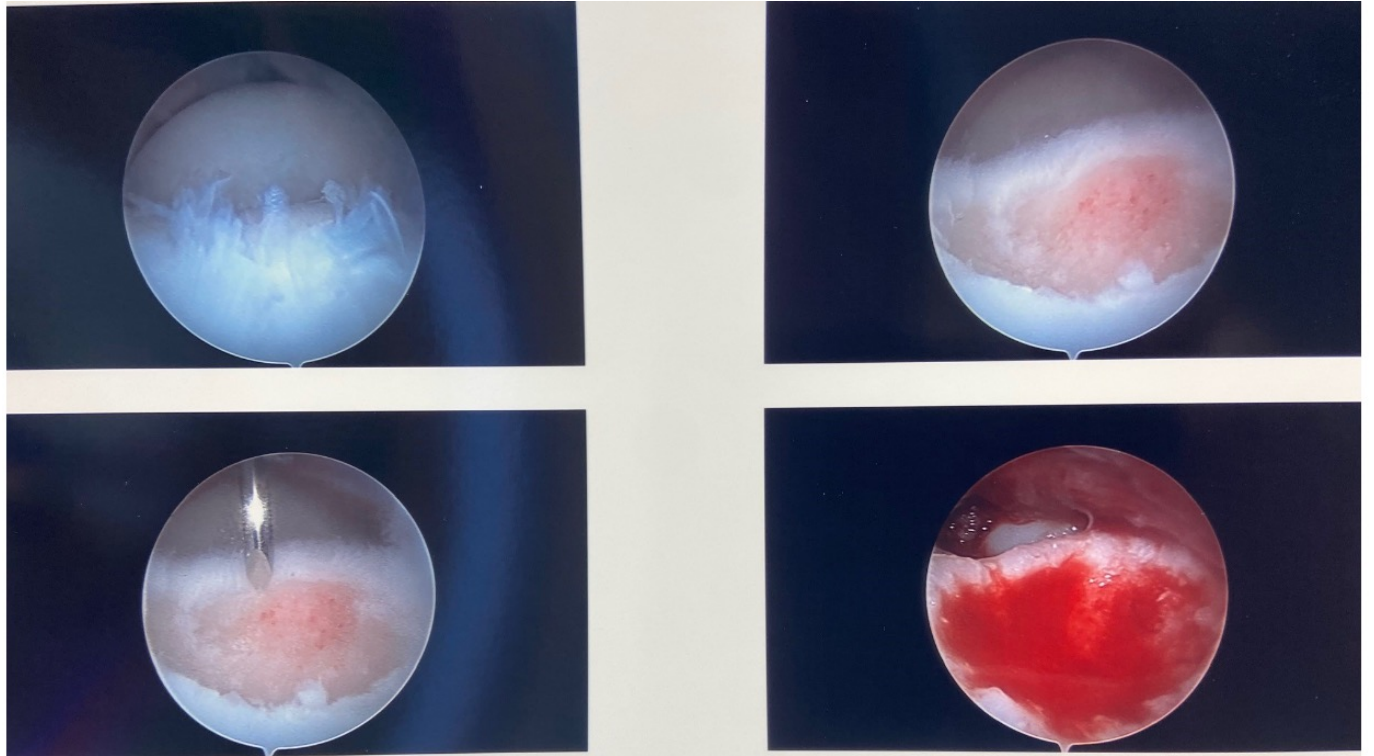
Debride (clean up) defect

Drill holes in the bone to form a
blood clot

Over time, the clot turns to
cartilage



Marrow Stimulation (Drilling)



Complications and Considerations

Anesthesia

Bleeding

Nerve injury

Infection / wound issues

Stiffness / scarring

Clicking (non-painful)

Reoperation (<5%)

Failure to return to sport (15-20%)

Negative career/financial implications

Return to Sport After Operative Management of Osteochondritis Dissecans of the Capitellum

A Systematic Review and Meta-analysis

Robert W. Westermann,^{*†} MD, Kyle J. Hancock,[†] MD, Joseph A. Buckwalter,[†] MD, PhD, Benjamin Kopp,[†] BS, Natalie Glass,[†] PhD, and Brian R. Wolf,[†] MD, MS
Investigation performed at the University of Iowa, Iowa City, Iowa, USA



Results

13.8 years old (50% male)

77% dominant arm

22.7% bilateral

Gymnastics (22.7%) and baseball
(22.7%) most common sport

Improved pain

Improved patient-reported
outcomes

Reoperation

Return to sport



Physical Therapy

Sling for comfort

Back to school within a few days as pain allows

Physical therapy (PT) starts 3-7 days after surgery

- Frequency dictated by PT team, insurance, individual goals, etc.

Early range of motion!

Running at 12 weeks

Loadbearing exercises (e.g. push-ups) at 4-5 months

Interval sport program (e.g. throwing) at 5-6 months

Return to sport at 6-9 months depending on sport





Seattle Children's[®]
HOSPITAL • RESEARCH • FOUNDATION

Hope. Care. Cure.