

Debridement for Elbow Osteochondritis Dissecans (OCD)



Michael Saper, DO, ATC, CSCS
Assistant Professor, Orthopedics and Sports Medicine

Anatomy

- The elbow is the connection of the upper arm bone (humerus) and the two bones of the forearm (radius and ulna).
- The **capitellum** is a knob on the lower end of the humerus that forms a joint with cup-shaped end of the radius (radial head).
- The ends of the bones are covered with cartilage which allows a smooth gliding surface.



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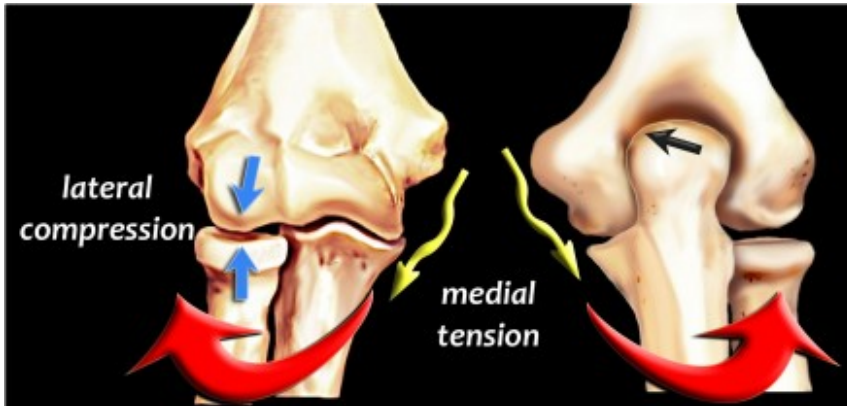


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What is OCD?

- **Injury to the bone** below the cartilage
 - Due to loss of blood supply from repetitive trauma (e.g. throwing, gymnastics)
- **Risk for instability and disruption of overlying cartilage**
- May result in **premature arthritis**



Without surgery....

- The OCD **won't heal**
- Persistent **pain**
- *Poor* long term **function**
- **Loose bodies**
- **Locking/catching**
- **Loss of motion**
- *Increased* **arthritis**
- *Decreased* **return to sport**



Elbow Arthroscopy

Outpatient surgery (go home same day)

General anesthesia (asleep the whole surgery and won't feel anything)

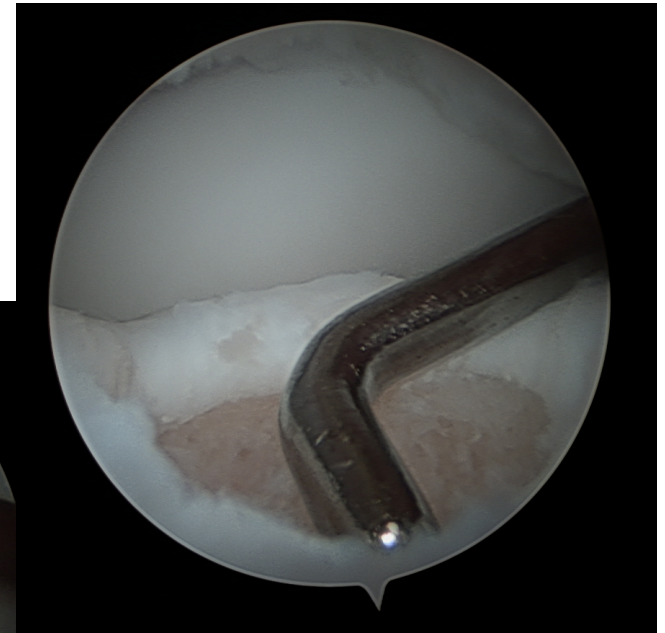
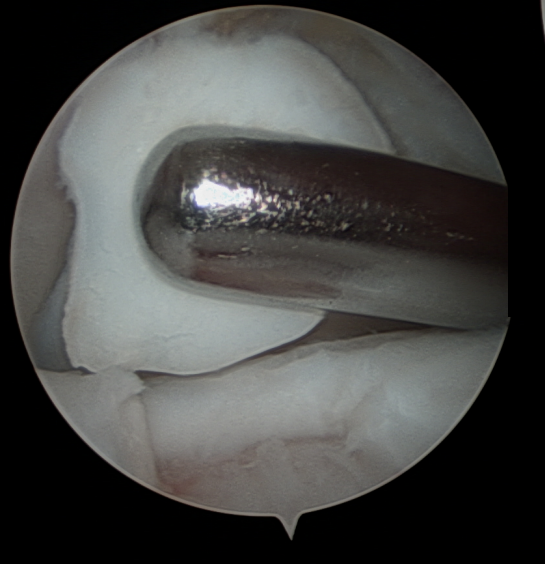
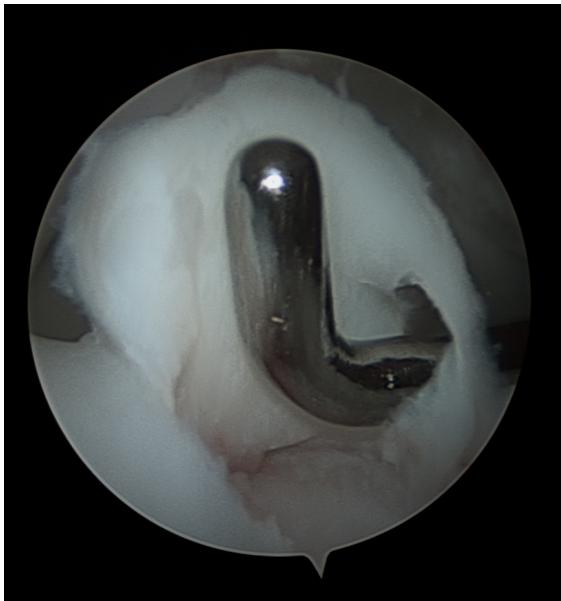
Arthroscopic surgery with small incisions

Remove loose bodies

Debride (clean-up) defect



Debridement and Loose Body Removal



Complications and Considerations

Anesthesia

Bleeding

Nerve injury

Infection

Stiffness

Revision surgery (2-13%)

- Mostly re-bridement

**Return to same level or higher
of sport (40-100%)**

Long-Term Clinical Outcomes of Osteochondritis Dissecans Lesions of the Elbow Treated with Arthroscopy

Michael Ryan, Benton Emblom, E. Lyle Cain MD, Jeffrey Dugas MD, **Marcus Rothermich MD**

Andrews Sports Medicine & Orthopaedic Center, American Sports Medicine Institute

Both Debridement and Microfracture Produce
Excellent Results for Osteochondritis Dissecans
Lesions of the Capitellum: A Systematic Review

Richard J. McLaughlin, M.D., Devin P. Leland, M.D., Christopher D. Bernard, M.D.,
Joaquin Sanchez-Sotelo, M.D., Ph.D., Mark E. Morrey, M.D.,
Shawn W. O'Driscoll, M.D., Ph.D., and Christopher L. Camp, M.D.

**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

Westermann et al. *OJSM* 2016
McLaughlin et al. *ASMAR* 2021
Ryan et al. *AOSSM 2021 Meeting*

Rehabilitation and Return to Sports

Sling for comfort

Encourage range-of-motion exercises

- Goal = full ROM by 6 weeks

Light elbow resistance exercises at 6 weeks

Advance loadbearing exercises

Return to sport at 6-8 weeks+ depending on sport



Conclusions

Goals = remove diseased tissue, return to sports

Surgery generally results in improved outcomes

Low rate of complications

Slow, progressive rehabilitation is key

Return to sports (6-8 weeks depending on sport)

Thank you for your attention!



Contact:

Michael.Saper@seattlechildrens.org

@DrMichaelSaper

