

# AAHKS Team Member Course Knee Panel Discussion

Dallas 2016

# Case 1

- 56 year old male
- 3 years of symptoms
- Had intermittent NSAIDs, brace
- Cortisone x 3
- HA x 2
- MRI: mild/moderate DJD medial and patello femoral joint

# Xrays



# Questions

- More conservative Rx/
- Any role for wedges?
- Unloader braces?
- PRP, Stem cells?
- More info needed?
- Any more studies?

# Surgery Choices

- Role of scope in arthritic knee
- Osteotomy?
  - Opening/closing wedge?
- Uni?
- Uni plus ACL? (staged, same day?)
- TKR?
- Conversation on outcomes, restrictions, conversions

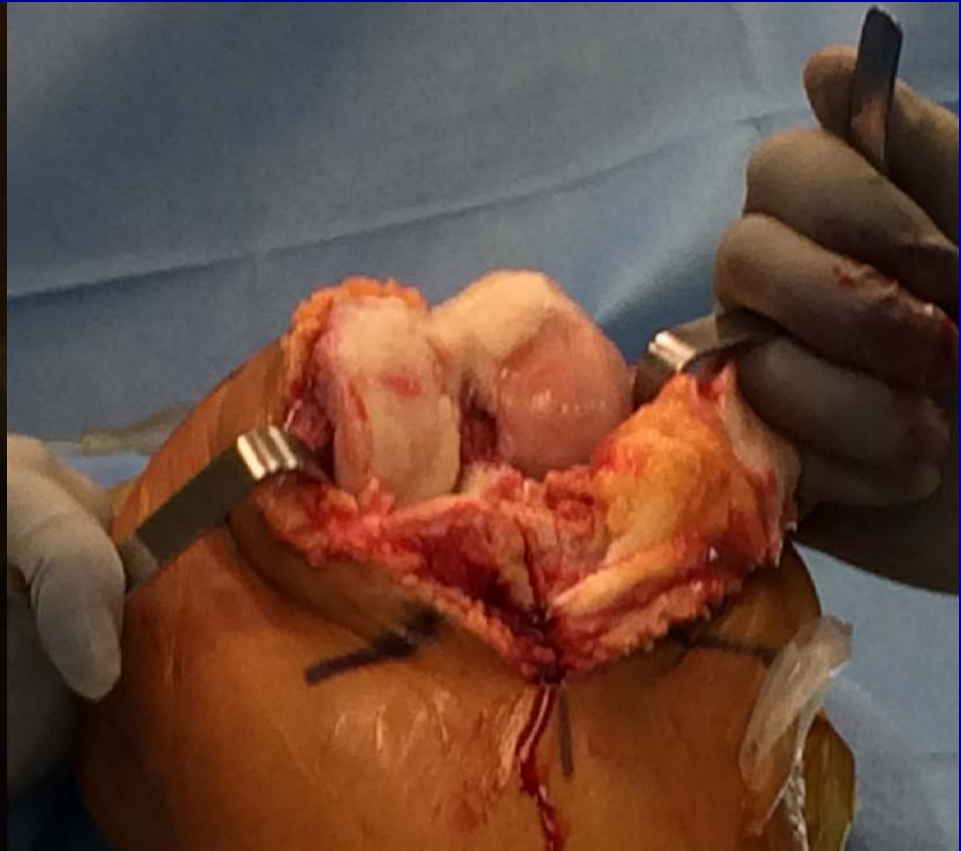
# Unis

- Indications?
  - Obesity
  - Age
  - Deformity
  - ACL
  - Crystals
  - Patello femoral changes accepted
  - Psychology?
  - Role of MRI in work up
- Incisions?

# Pre-op Appearance



# Pre-op Caution





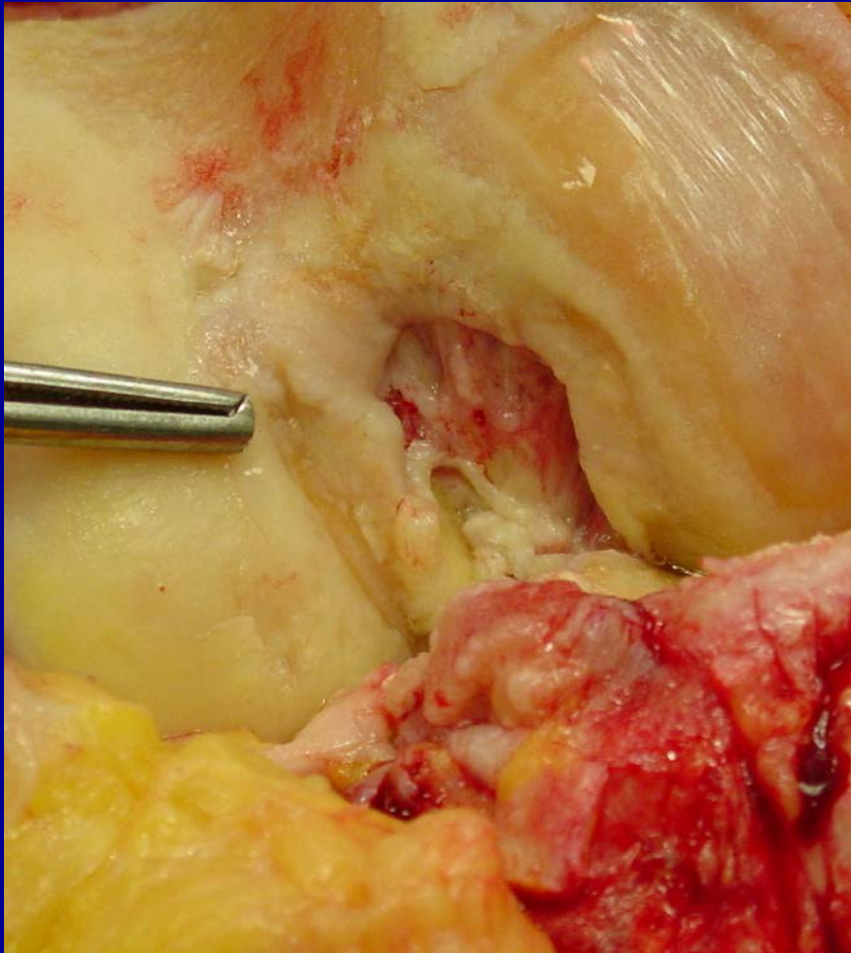
# Pre- op Caution



# Contingency Plans

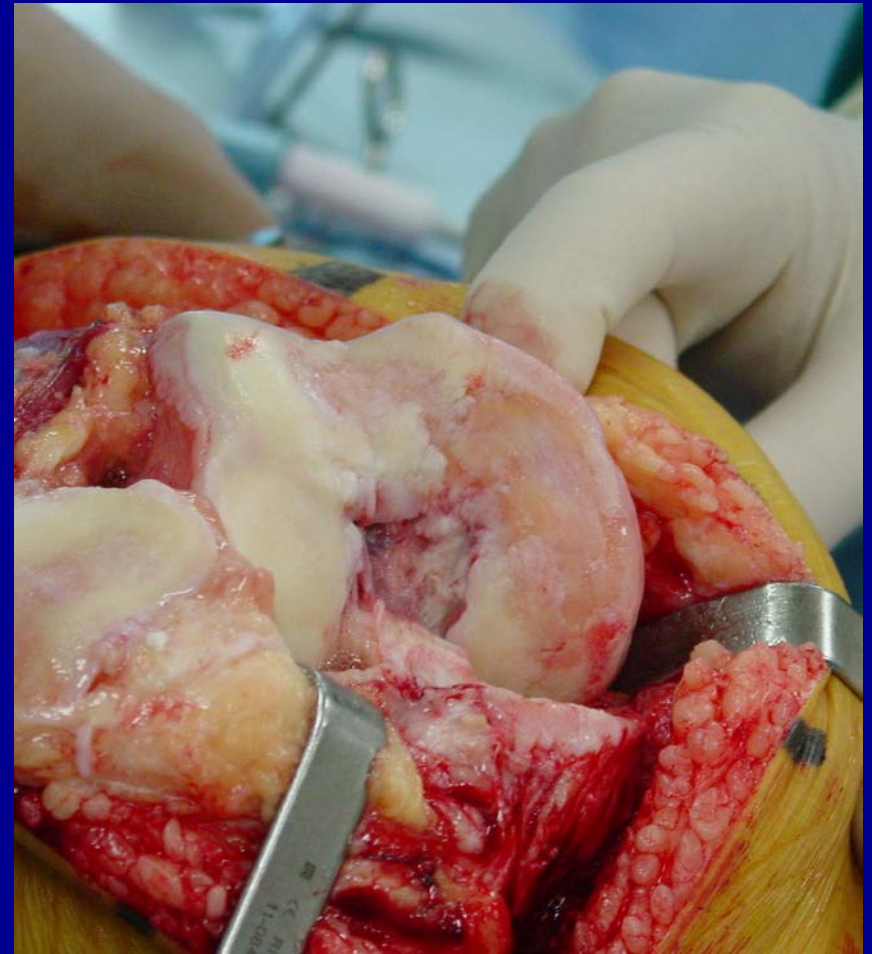
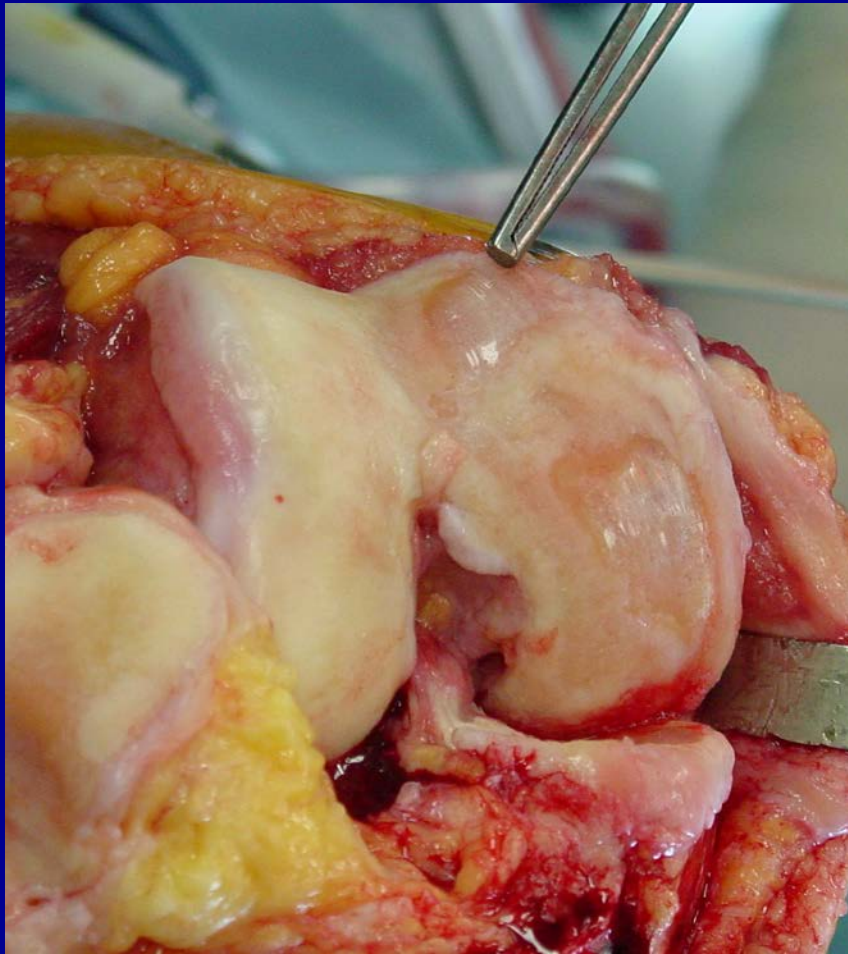
- Convert to TKR?
- Discuss w patient?
- What about Outpatient setting?

# Intra-op appearance questions





# Intra-op appearance questions



# Post op



# Post op

- Anticoagulation
- Rehab issues compared to TKR
- Out patient?
- When drive?
- Any limits post op?

# Case 2

# Lateral Unis

- Any difference compared to Medial
  - Indications
  - Contra indications
- Technical considerations
  - Sizes
  - Rotation
  - Approach
  - Minimal number per year?
- Role of Distal Femoral Osteotomy?



# Lateral Uni

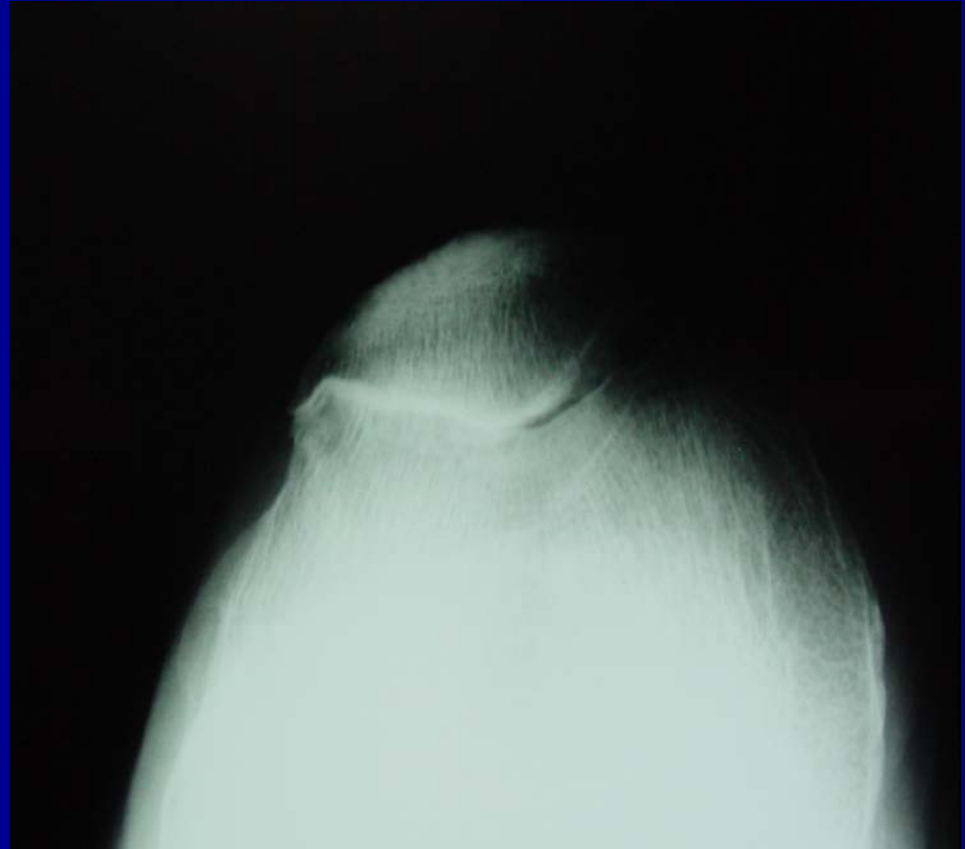


# Case 3

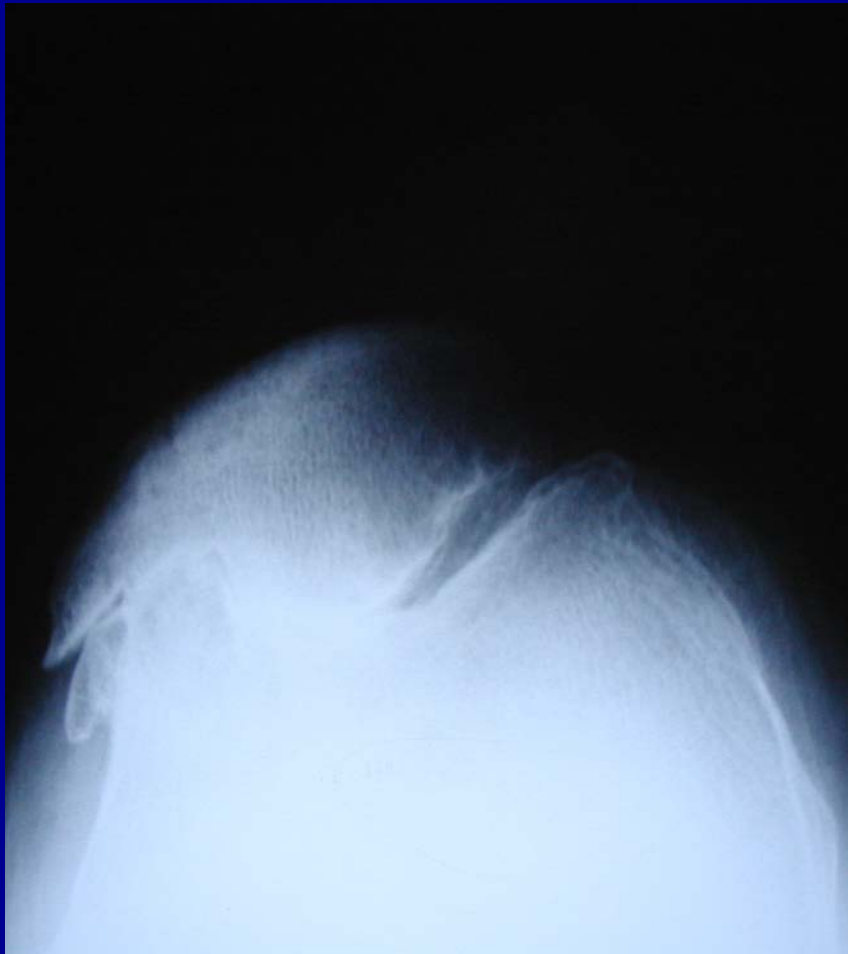
## Patello-Femoral Arthritis

# PatelloFemoral arthritis

- Evaluation
- Non surgical choices
  - Injection
  - PT
  - Brace
- How often follow up?
- Issue of bone stock?
- Those who don't resurface....



Any difference?



# Post Op



# Case 4

Role of constraint in TKR?

# Case 4a

- 81 year old male
- 10 degree FFC
- ROM 10-80
- Fixed deformity
- Failed conservative Rx
- Role of pre-op PT?
- Discussion on post op ROM
- Implant choice?



# Case 4b

- 73 year old female
- 10 degree hyperextension
- ROM +10-135
- Role of brace, PT
- Any difference if stiff?
- Any particular potential complications?





# Role of Constraint?

- Least possible?
- No longer an issue with “better devices”?
- Any difference with severe varus v valgus?
- Always need PS?
- Downsides to excess constraint



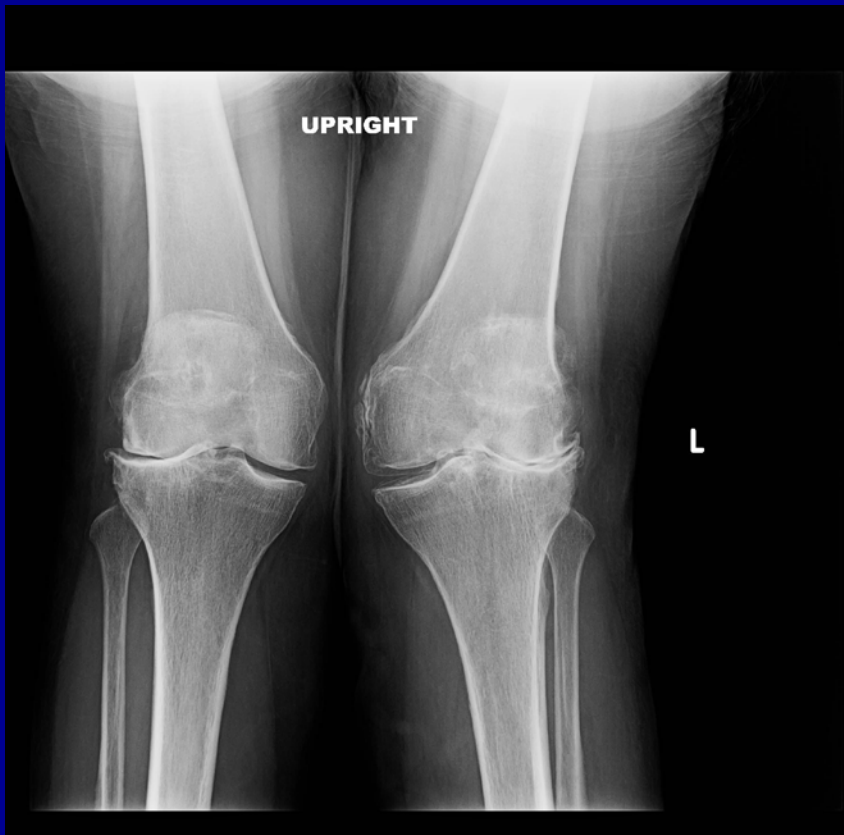
# Can be used in Severe Varus



# Lateral views of Severe Varus knees



# Can be used in Severe Valgus





# Lateral views of Severe Valgus knees



# CR Retention in > 15 Degree Deformity

- AAHKS 2014
- 63 knees in 55 patients
- 45 female; 10 male
- 55 valgus' 8 varus
- Knee Society Scores: 35-93
- 7 revisions: 3 infections; 3 polywear; 1 fracture
- Average time to revision 5 years

# Bilateral Knees

- When
- Why
- Contraindications
- Pain control
- Ever do UKR and TKR
- If bad hip, which first
- Always match devices





# Case 5

Uncemented TKR

# Case 5

- 59 year old BMI 38
- ROM 5-115
- Failed conservative Rx
- Pain with ADLs
- Assuming TKR:  
resurface patella?
- Antibiotics in cement?



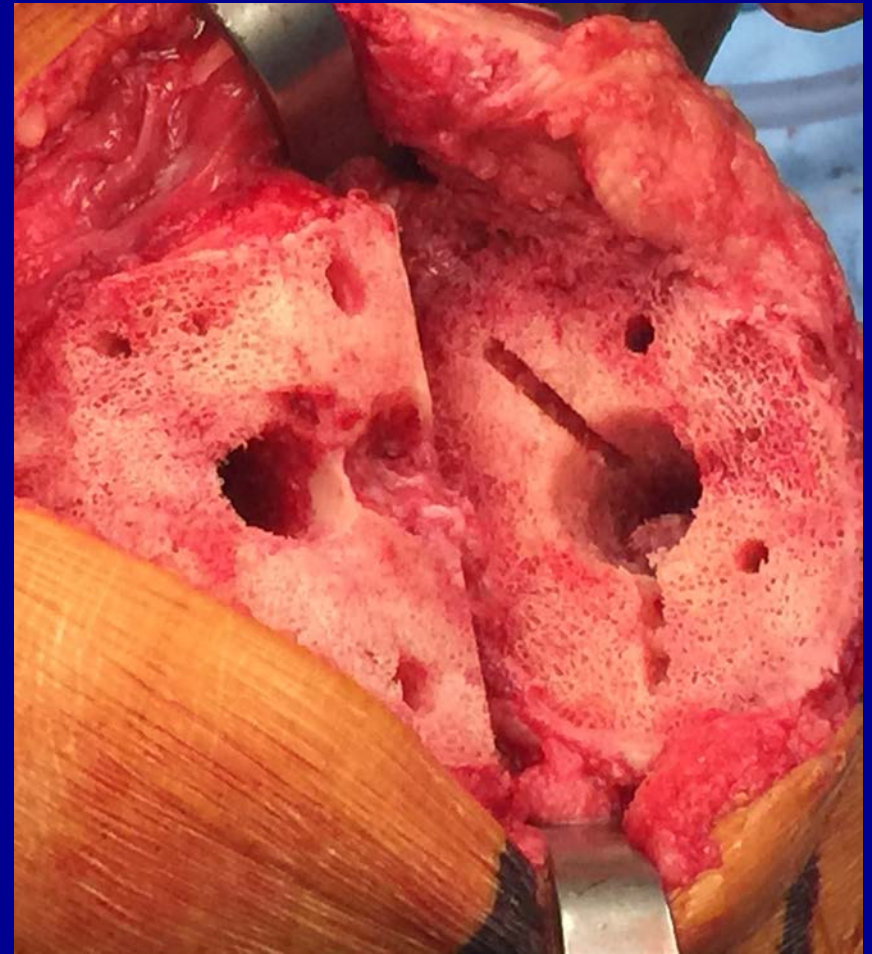
# Uncemented TKR

- Role of Uncemented TKR?
- Indications/Contra
  - Age, bone quality, weight/ BMI
- Role of HA
- Role of “modern metals”



# Uncemented TKR

- Technical issues?
- Post op: any differences
- Rehab protocol: any differences
- Cement the patella?





# Results of UC TKA

<b>Author</b>	<b>Publication year</b>	<b>Device (Manufacturer)</b>	<b>No. of TKRs</b>	<b>Follow-up (yrs)</b>	<b>Survivorship (%)</b>
<b>Buechel et al</b>	2001	New Jersey LCS TKR (DePuy)	140	16	100
<b>Cossetto and Gouda</b>	2011	AMK DuoFix (DePuy)	175	5.5	98.8
<b>Hofmann et al</b>	2001	Natural-Knee (Zimmer)	300	12	95.1
<b>Buechel</b>	2002	LCS Rotating Platform (DePuy)	169	20	99.4
<b>Watanabe et al</b>	2004	Osteonics 3000 (Omnifit)	76	10	96.7
<b>Cross and Parish</b>	2005	Active (Australian Surgical Design and Manufacture)	1000	9	99.14
<b>Hardeman et al</b>	2006	Profix (Smith & Nephew)	115	8 to 10	97.1
<b>Whiteside and Viganò</b>	2007	Profix (Smith & Nephew)	1556	7	100
<b>Chana et al</b>	2008	Duracon (Stryker)	186	8	98.6
<b>EpINETTE and Manley</b>	2007	HA Omnifit Knee Prosthesis (Stryker)	146	11	98.14
<b>Eriksen et al</b>	2009	AGC 2000 (Biomet)	114	20	85
<b>Kamath et al</b>	2011	NexGen (Zimmer)	100	5	100
<b>Ritter and Meneghini</b>	2010	AGC (Biomet)	73	20	98.3
<b>Choy et al</b>	2014	LCS Rotating Platform (DePuy)	82	8 to 11	100



# Conclusion

- Data analysis shows UC TKA effective and durable
- Increasing interest due to larger numbers younger more active patients
- Quest for a more permanent, biological fixation will lead to more UC usage
- More data will help answer unknowns



