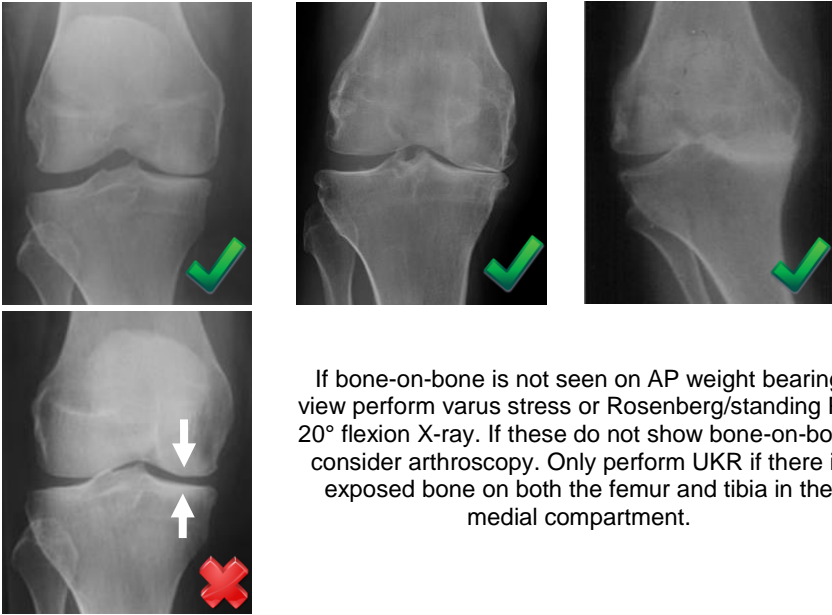
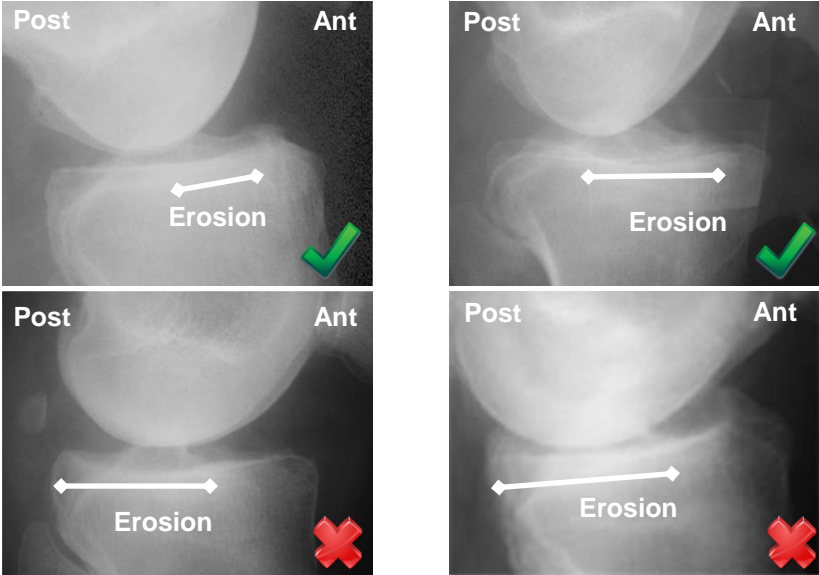
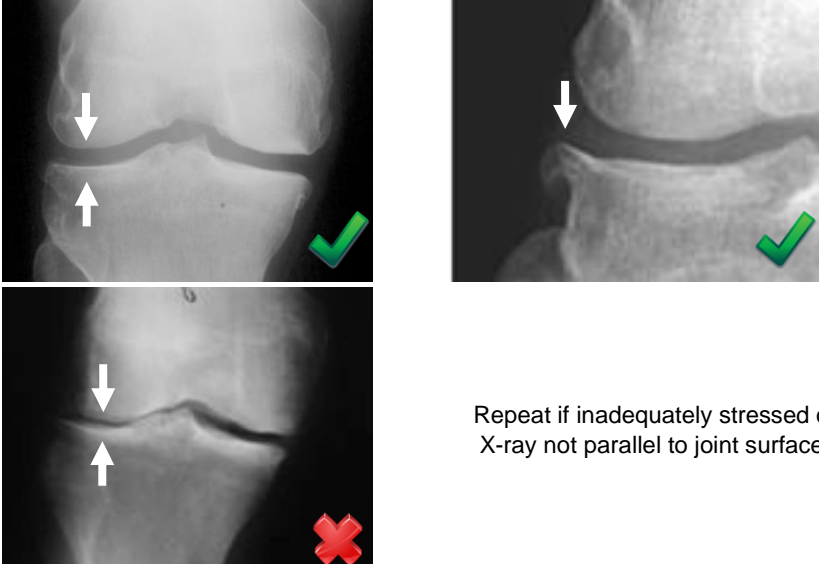


# Radiographic assessment for medial Oxford UKR

- Recommended X-rays: AP weight bearing, true lateral, valgus stress & skyline. (Varus stress or Rosenberg/standing PA 20° flexion if bone-on-bone not seen on AP X-ray)
- Only proceed if all criteria are satisfied.

Criterion	Example X-rays	Conclusion <input checked="" type="checkbox"/>
<p><b>(1)</b> Medial bone-on- bone</p> <p>X-ray:  <ul style="list-style-type: none"> <li>▪ AP weight bearing</li> <li>▪ Varus stress (20° flexion) or Rosenberg/standing PA 20° flexion</li> </ul> </p>	 <p>If bone-on-bone is not seen on AP weight bearing view perform varus stress or Rosenberg/standing PA 20° flexion X-ray. If these do not show bone-on-bone consider arthroscopy. Only perform UKR if there is exposed bone on both the femur and tibia in the medial compartment.</p>	<p>Bone-on-bone (or bone loss) Meets criteria <input checked="" type="checkbox"/></p> <p>No bone-on-bone Does not meet criteria <input type="checkbox"/></p>
<p><b>(2)</b> Functionally intact ACL</p> <p>X-ray:  <ul style="list-style-type: none"> <li>▪ True lateral (femoral condyles overlapping)</li> </ul> </p>		<p>Functional ACL (preserved posterior tibia) Meets criteria <input checked="" type="checkbox"/></p> <p>Absent ACL (posterior erosion/subluxation) Does not meet criteria <input type="checkbox"/></p>
<p><b>(3)</b> Full thickness lateral cartilage</p> <p>X-ray:  <ul style="list-style-type: none"> <li>▪ Valgus stress (20° flexion)</li> </ul> </p>	 <p>Repeat if inadequately stressed or X-ray not parallel to joint surface.</p>	<p>Full thickness (ignore osteophytes) Meets criteria <input checked="" type="checkbox"/></p> <p>Lateral narrowing Does not meet criteria <input type="checkbox"/></p>

# Radiographic assessment for medial Oxford UKR

Criterion	Example X-rays	Conclusion <input checked="" type="checkbox"/>
<p>(4) Functionally normal MCL (correctable intra-articular deformity)</p> <p>X-ray: ▪ Valgus stress (20° flexion)</p>		<p>Correctable deformity (Normal medial opening) Meets criteria</p>
	<p>Repeat if inadequately stressed or X-ray not parallel to joint surface</p>	<p>Not correctable (Incomplete medial opening) Does not meet criteria</p>
<p>(5) Acceptable patello-femoral joint</p> <p>X-ray: ▪ Skyline</p>		<p>Meets criteria</p>
	<p>PFJ acceptable if:</p> <ul style="list-style-type: none"> <li>▪ Normal</li> <li>▪ Medial facet OA, with or without bone loss</li> <li>▪ Lateral facet OA, <u>without</u> bone loss</li> </ul> <p>PFJ not acceptable:</p> <ul style="list-style-type: none"> <li>▪ Lateral facet OA, <u>with</u> bone loss, grooving &amp; subluxation</li> </ul>	<p>Does not meet criteria</p>

The primary indication for the Oxford UKR is anteromedial OA. The diagnosis of anteromedial OA is based on the radiographic criteria shown above [1]. Medial avascular necrosis is also an indication.

The following factors do not preclude Oxford UKR if all other criteria are met:

- Isolated medial pain is not a requirement. Pre-operative anterior knee pain has been reported to not compromise the outcome [2,3].
- Patient's age, weight and activity level [4-6].
- Chondrocalcinosis (cartilage calcification on X-ray), lateral marginal osteophytes or medial tibial subluxation (which should correct when the UKR is implanted if the ACL is intact) [6-8].

The final decision on whether to perform UKR is made when the knee has been opened and directly inspected. The following factors do not preclude Oxford UKR if all other criteria are met:

- Full thickness cartilage loss on the non-weight bearing medial side of the lateral femoral [9].
- Full thickness cartilage loss in the patellofemoral joint

[1] Hamilton TW et al. Validation of a Radiological Decision Aid to Determine Suitability for Medial Mobile-bearing Unicompartmental Knee Replacement. NIHR Doctoral Research Training Camp Poster. July 2015.

[2] Berend K et al. Does Preoperative Patellofemoral Joint State Affect Medial Unicompartmental Knee Arthroplasty Survival? AAOS Poster No. P204. February 2011.

[3] Liddle AD et al. Preoperative pain location is a poor predictor of outcome after Oxford unicompartmental knee arthroplasty at 1 and 5 years. KSSTA 21:2421-6, 2013.

[4] Berend K. et al. Obesity, Young Age, Patellofemoral Disease and Anterior Knee Pain: Identifying the Unicompartmental Knee Replacement Patient in the United States. Orthopedics. 30:19-23, 2007.

[5] Kang, S. et al. Pre-operative Patellofemoral Degenerative Changes Do Not Affect the Outcome After Medial Oxford Unicompartmental Knee Replacement. JBJS Br. 93-B:476-8, 2010.

[6] Pandit H. et al. Unnecessary Contraindications for Mobile-bearing Unicompartmental Knee Replacement. JBJS Br. 93-B:622-8, 2011.

[7] Goodfellow JW, O'Connor J, Pandit H, Dodd C, Murray D. Unicompartmental Arthroplasty with the Oxford Knee (2nd Edition), Goodfellow Publishers, Oxford, UK, 2015. [8] Kumar V et al. Comparison of Outcomes after UKA in Patients With and Without Chondrocalcinosis: A Matched Cohort Study. KSSTA 2015 online 19 March 2015.

[9] Kendrick BJ et al. The implications of damage to the lateral femoral condyle on medial unicompartmental knee replacement. JBJS Br 92(3)374-9, 2010.