

Technologist Review System Knee Radiography

| Category | Α | В | Comments | | |
|---|---|---|---|--|--|
| All Exams | | | | | |
| Complete exam | All projections | Missing any of the projections | | | |
| Overlying material removed | No overlying material or trivial overlying material which does not obscure anatomy | Overlying material which obscures anatomy | More than minimal overlying clothing may mimic chondrocalcinosis, retained foreign material, or a fracture. | | |
| Motion artifact | None or trivial (questionable) motion artifact which does not obscure anatomy | Motion artifact which obscures anatomy | Motion artifact may mimic periostitis or obscure fracture lines. | | |
| | | AP Exam | | | |
| AP horizontal alignment: Horizontal tibial plateau | 4 or less mm of offset from anterior to posterior along EITHER the medial OR the lateral tibial plateau (at least one tibial plateau is angled 4 mm or less). | 5 mm or more offset from anterior to posterior along both the medial AND lateral tibial plateau (both tibial plateaus are angulated more than 5 mm) | Correct alignment allows evaluation of joint space narrowing in arthritis and chondrocalcinosis and meniscal calcification in crystal arthropathy. | | |
| AP rotation: Patella overlap of the femur | Patella completely overlapping the femur. | Patella extends to the side past the femur margin. | Correct rotation is necessary to visualize the tibial spines (to evaluate for degenerative spur formation) and the femoral condyles (to evaluate for AVN). | | |
| | | Lateral Exam | | | |
| Lateral horizontal alignment: aligned inferior femoral condyles | Less than 10 mm between inferior aspect of femoral condyles (see below for method of measurement). | 10 mm or more between inferior aspect of femoral condyles (see below for method of measurement). | Correct alignment allows evaluation of joint space narrowing in arthritis and chondrocalcinosis and meniscal calcification in crystal arthropathy. | | |
| Lateral rotation: aligned posterior femoral condyles | Less than 10 mm between the posterior aspect of the femoral condyles (see below for method of measurement). | 10 mm or more between the posterior aspect of the femoral condyles (see below for method of measurement). | Correct rotation allows evaluation of the suprapatellar recess for effusion and the femoral condyles for a prominent patellofemoral sulcus which may accompany ACL tears. | | |



AP Examination Horizontal Alignment





A: < 4 mm (no offset). Note chondrocalcinosis.

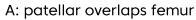
B: > 4 mm offset along the plateau both laterally and medially.

| Category | A | В |
|-----------------------|---|--|
| AP horizontal | 4 or less mm of offset from anterior to posterior | 5 mm or more offset from anterior to posterior |
| alignment: Horizontal | along EITHER the medial OR the lateral tibial | along both the medial AND lateral tibial plateau |
| tibial plateau | plateau (at least one tibial plateau is angled 4 mm | (both tibial plateaus are angulated more than 5 |
| | or less). | mm) |



AP Examination Rotation







B: patella does not completely overlap femur

| Category | A | В |
|-------------------------------------|------------------------------------|--|
| AP rotation: Patella overlap of the | Patella completely overlapping the | Patella extends to the side past the femur |
| femur | femur. | margin. |



Lateral Examination Horizontal Alignment

Measure the distance from one femoral condyle and measure the distance to the other condyle (along the axis of the femur).





A: Minimal horizontal offset of the femoral condyles

B: Horizontal offset of the femoral condyles of more than 10 mm

| Category | A | В |
|-------------------------------|--|---|
| Lateral horizontal alignment: | Less than 10 mm between inferior aspect of | 10 mm or more between inferior aspect of |
| aligned inferior femoral | femoral condyles (see below for method of | femoral condyles (see below for method of |
| condyles | measurement). | measurement). |



Lateral Examination Rotation

Measure the distance from one posterior condyle to the other condyle (perpendicular to the long axis of the femur).



A: No lateral offset along the femoral condyles



B: Lateral offset of the femoral condyles of more than 10 mm

| Category | A | В |
|-------------------------------------|---------------------------------------|-------------------------------------|
| Lateral rotation: aligned posterior | Less than 10 mm between the posterior | 10 mm or more between the posterior |
| femoral condyles | aspect of the femoral condyles. | aspect of the femoral condyles. |