2000

IKDC KNEE EXAMINATION FORM

Patient Name:_____ Date of Birth:_____/_____/_____
Day Month Year

Gender: F M Age:_____ Date of Examination:_____/_____/_____
Day Month Year

Generalized Laxity: tight normal lax

Alignment: obvious varus normal obvious valgus

Patella Position: obvious baja normal obvious alta

Patella Subluxation / Dislocation: centered subluxable subluxed dislocated

Range of Motion (Ext / Flex): Index Side: passive_____/_____/_____ active_____/_____/_____
Opposite Side: passive_____/_____/_____ active_____/_____/_____

SEVEN GROUPS		FOUR GRADES A Normal	B Nearly Normal	C Abnormal	D Severely Abnormal	*Group Grade A B C D
1.	Effusion	None	Mild	Moderate	Severe	
2.	Passive Motion Deficit					
	ΔLack of extension	<3°	3 to 5°	6 to 10°	>10°	
	ΔLack of flexion	0 to 5°	6 to 15°	16 to 25°	>25°	
3.	Ligament Examination (manual, instrumented, x-ray)					
	ΔLachman (25° flex) (134N)	-1 to 2mm	3 to 5mm(1^+) <-1 to –3	6 to 10mm(2^+) <-3 stiff	>10mm(3^+)	
	ΔLachman (25° flex) manual max	-1 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	Anterior endpoint:	firm		soft		
	ΔTotal AP Translation (25° flex)	0 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	ΔTotal AP Translation (70° flex)	0 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	ΔPosterior Drawer Test (70° flex)	0 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	ΔMed Joint Opening (20° flex/valgus rot)	0 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	ΔLat Joint Opening (20° flex/varus rot)	0 to 2mm	3 to 5mm	6 to 10mm	>10mm	
	ΔExternal Rotation Test (30° flex prone)	<5°	6 to 10°	11 to 19°	>20°	
	ΔExternal Rotation Test (90° flex prone)	<5°	6 to 10°	11 to 19°	>20°	
	ΔPivot Shift	equal	+glide	++(clunk)	+++(gross)	
	ΔReverse Pivot Shift	equal	glide	gross	marked	
4.	Compartment Findings			crepitation with		
	ΔCrepitus Ant. Compartment	none	moderate	mild pain	>mild pain	
	ΔCrepitus Med. Compartment	none	moderate	mild pain	>mild pain	
	ΔCrepitus Lat. Compartment	none	moderate	mild pain	>mild pain	
5.	Harvest Site Pathology	none	mild	moderate	severe	
6.	X-ray Findings					
	Med. Joint Space	none	mild	moderate	severe	
	Lat. Joint Space	none	mild	moderate	severe	
	Patellofemoral	none	mild	moderate	severe	
	Ant. Joint Space (sagittal)	none	mild	moderate	severe	
	Post. Joint Space (sagittal)	none	mild	moderate	severe	
7.	Functional Test					
	One Leg Hop (% of opposite side)	≥90%	89 to 76%	75 to 50%	<50%	
**Final Evaluation						

* Group grade: The lowest grade within a group determines the group grade

** Final evaluation: the worst group grade determines the final evaluation for acute and subacute patients. For chronic patients compare preoperative and postoperative evaluations. In a final evaluation only the first 3 groups are evaluated but all groups must be documented. Δ Difference in involved knee compared to normal or what is assumed to be normal.

IKDC COMMITTEE AOSSM: Anderson, A., Bergfeld, J., Boland, A. Dye, S., Feagin, J., Harner, C. Mohtadi, N. Richmond, J. Shelbourne, D., Terry, G. ESSKA: Staubli, H., Hefti, F., Hoher, J., Jacob, R., Mueller, W., Neyret, P. APOSSM: Chan, K., Kurosaka, M.

INSTRUCTIONS FOR THE 2000 IKDC KNEE EXAMINATION FORM

The Knee Examination Form contains items that fall into one of seven measurement domains. However, only the first three of these domains are graded. The seven domains assessed by the Knee Examination Form are:

1. Effusion
   An effusion is assessed by ballotting the knee. A fluid wave (less than 25 cc) is graded mild, easily ballotteable fluid – moderate (25-60 cc), and a tense knee secondary to effusion (greater than 60 cc) is rated severe.

2. Passive Motion Deficit
   Passive range of motion is measured with a gonimeter and recorded on the form for the index side and opposite or normal side. Record values for zero point/hyperextension/flexion (e.g. 10 degrees of hyperextension, 150 degrees of flexion = 10/0/150; 10 degrees of flexion to 150 degrees of flexion = 0/10/150). Extension is compared to that of the normal knee.

3. Ligament Examination
   The Lachman test, total AP translation at 70 degrees, and medial and lateral joint opening may be assessed with manual, instrumented or stress x-ray examination. Only one should be graded, preferably a "measured displacement". A force of 134 N (30 lbs) and the maximum manual are recorded in instrumented examination of both knees. Only the measured displacement at the standard force of 134 N is used for grading. The numerical values for the side to side difference are rounded off, and the appropriate box is marked.

   The end point is assessed in the Lachman test. The end point affects the grading when the index knee has 3-5 mm more anterior laxity than the normal knee. In this case, a soft end point results in an abnormal grade rather than a nearly normal grade.

   The 70-degree posterior sag is estimated by comparing the profile of the injured knee to the normal knee and palpating the medial femoral tibial stepoff. It may be confirmed by noting that contraction of the quadriceps pulls the tibia anteriorly.

   The external rotation tests are performed with the patient prone and the knee flexed 30° and 70°.
   Equal external rotational torque is applied to both feet and the degree of external rotation is recorded.

   The pivot shift and reverse pivot shift are performed with the patient supine, with the hip in 10-20 degrees of abduction and the tibia in neutral rotation using either the Losee, Noyes, or Jakob techniques. The greatest subluxation, compared to the normal knee, should be recorded.

4. Compartment Findings
   Patellofemoral crepitation is elicited by extension against slight resistance. Medial and lateral compartment crepitation is elicited by extending the knee from a flexed position with a varus stress and then a valgus stress (i.e., McMurray test). Grading is based on intensity and pain.

5. Harvest Site Pathology
   Note tenderness, irritation or numbness at the autograft harvest site.

6. X-ray Findings
   A bilateral, double leg PA weightbearing roentgenogram at 35-45 degrees of flexion (tunnel view) is used to evaluate narrowing of the medial and lateral joint spaces. The Merchant view at 45 degrees is used to document patellofemoral narrowing. A mild grade indicates minimal changes (i.e., small osteophytes, slight sclerosis or flattening of the femoral condyle) and narrowing of the joint space which is just detectable. A moderate grade may have those changes and joint space narrowing (e.g., a joint space of 2-4 mm side or up to 50% joint space narrowing). Severe changes include a joint space of less than 2 mm or greater than 50% joint space narrowing.

7. Functional Test
   The patient is asked to perform a one leg hop for distance on the index and normal side. Three trials for each leg are recorded and averaged. A ratio of the index to normal knee is calculated.