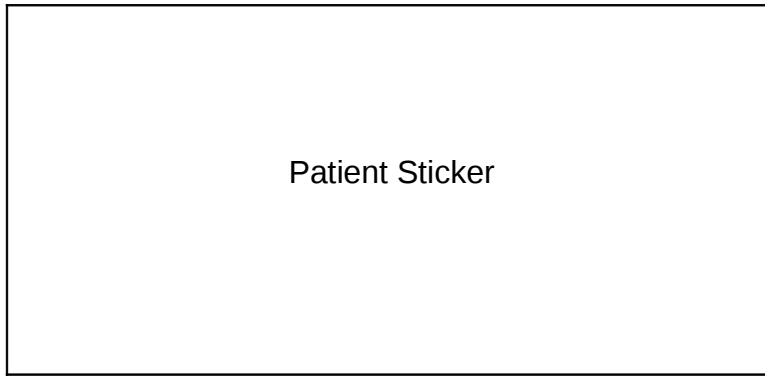


Articular cartilage repair – Patient Assessment and Progress Sheet



Thank you for taking the time to answer these questions which should only take a few minutes. The answers you give are very useful as they will help us assess your progress following your surgery. If you have any difficulties with the questions please feel free to ask a member of staff for help.

Once you have filled in the form please hand it to the nurse or doctor in clinic and they will file it in your notes

Mr Dipak Raj
Consultant Orthopaedic Surgeon
Pilgrim Hospital, Boston PE21 9QS England

NHS secretary 01205 446415
Private secretary 0845 6439597 (local call rate)
E mail: contact@medskills.co.uk

Date Today			
Your Age			
Your Occupation			
Date of Injury			
Side of injury (left or right)			
If you smoke, how many a day?			
Your Weight		BMI	
Your Height		ASA	

Articular cartilage repair – Patient Assessment and Progress Sheet
The Tegner Activity Score

Please Tick the maximum activity level which best describes you...

	Pre Injury	Pre Surgery	Post Surgery	
10				<u>Competitive sports</u> - soccer, football, rugby (national elite)
9				<u>Competitive sports</u> - soccer, football, rugby (lower divisions), ice hockey, wrestling, gymnastics, basketball
8				<u>Competitive sports</u> - racquetball or bandy, squash or badminton, track and field athletics (jumping, etc.), down-hill skiing
7				<u>Competitive sports</u> - tennis, running, motorcars speedway, handball <u>Recreational sports</u> - soccer, football, rugby, bandy, ice hockey, basketball, squash, racquetball, running
6				<u>Recreational sports</u> - tennis and badminton, handball, racquetball, down-hill skiing, jogging at least 5 times per week
5				<u>Work</u> - heavy labour (construction, etc.) <u>Competitive sports</u> - cycling, cross-country skiing, <u>Recreational sports</u> - jogging on uneven ground at least twice weekly
4				<u>Work</u> - moderately heavy labour (e.g. truck driving, etc.)
3				<u>Work</u> - light labour (nursing, etc.)
2				<u>Work</u> - light labour Walking on uneven ground possible, but impossible to back pack or hike
1				<u>Work</u> - sedentary (secretarial, etc.)
0				Sick leave or disability pension because of knee problems

The Lysholm Knee Scoring Scale

During the past 4 weeks.....

Section 1 –Limp

- None
- Slight or periodical
- Severe and constant

Section 2 -Support

- None
- Stick or crutch
- Weight-bearing impossible

Section 3 – Pain

- None
- Inconstant and slight during severe exertion
- Marked during severe exertion
- Marked on or after walking more than 2 km
- Marked on or after walking less than 2 km
- Constant

Section 4 - Instability

- Never giving way
- Rarely during athletics or other severe exertion
- Frequently during athletics or other severe exertion (or incapable of participation)
- Occasionally in daily activities
- Often in daily activities
- Every step

Section 5 –Locking

- No locking and no catching sensations
- Catching sensation but no locking
- Locking Occasionally
- Frequently
- Locked joint on examination

Section 6 - Swelling

- None
- On severe exertion
- On ordinary exertion
- Constant

Section 7 - Stair-climbing

- No problems
- Slightly impaired
- One step at a time
- Impossible

Section 8 - Squatting

- No problems
- Slightly impaired
- Not beyond 90°
- Impossible

Articular cartilage repair – Patient Assessment and Progress Sheet
The IKDC Evaluation Form

SYMPTOMS*

*Grade symptoms at the highest activity level at which you think you could function without significant symptoms, even if you are not actually performing activities at this level...

1. What is the highest level of activity that you can perform without significant knee pain?

- ₄ Very strenuous activities like jumping or pivoting as in basketball or soccer
- ₃ Strenuous activities like heavy physical work, skiing or tennis
- ₂ Moderate activities like moderate physical work, running or jogging
- ₁ Light activities like walking, housework or yard work
- ₀ Unable to perform any of the above activities due to knee pain

2. During the past 4 weeks, or since your injury, how often have you had pain?

- | | | | | | | | | | | | | |
|-------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------|
| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| Never | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Constant |

3. If you have pain, how severe is it?

- | | | | | | | | | | | | | |
|---------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|
| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| No pain | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Worst pain imaginable |

4. During the past 4 weeks, or since your injury, how stiff or swollen was your knee?

- ₄ Not at all
- ₃ Mildly
- ₂ Moderately
- ₁ Very
- ₀ Extremely

5. What is the highest level of activity you can perform without significant swelling in your knee?

- ₄ Very strenuous activities like jumping or pivoting as in basketball or soccer
- ₃ Strenuous activities like heavy physical work, skiing or tennis
- ₂ Moderate activities like moderate physical work, running or jogging
- ₁ Light activities like walking, housework, or yard work
- ₀ Unable to perform any of the above activities due to knee swelling

Articular cartilage repair – Patient Assessment and Progress Sheet

6. During the past 4 weeks, or since your injury, did your knee lock or catch?

0 Yes 1 No

7. What is the highest level of activity you can perform without significant giving way in your knee?

- 4 Very strenuous activities like jumping or pivoting as in basketball or soccer
- 3 Strenuous activities like heavy physical work, skiing or tennis
- 2 Moderate activities like moderate physical work, running or jogging
- 1 Light activities like walking, housework or yard work
- 0 Unable to perform any of the above activities due to giving way of the knee

SPORTS ACTIVITIES:

8. What is the highest level of activity you can participate in on a regular basis?

- 4 Very strenuous activities like jumping or pivoting as in basketball or soccer
- 3 Strenuous activities like heavy physical work, skiing or tennis
- 2 Moderate activities like moderate physical work, running or jogging
- 1 Light activities like walking, housework or yard work
- 0 Unable to perform any of the above activities due to knee

9. How does your knee affect your ability to:

		Not difficult at all	Minimally difficult	Moderately Difficult	Extremely difficult	Unable to do
a.	Go up stairs	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
b.	Go down stairs	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
c.	Kneel on the front of your knee	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
d.	Squat	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
e.	Sit with your knee bent	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
f.	Rise from a chair	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
g.	Run straight ahead	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
h.	Jump and land on your involved leg	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
i.	Stop and start quickly	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>

Articular cartilage repair – Patient Assessment and Progress Sheet

FUNCTION:

10. How would you rate the function of your knee on a scale of 0 to 10 with 10 being normal, excellent function and 0 being the inability to perform any of your usual daily activities which may include sports?

FUNCTION PRIOR TO YOUR KNEE INJURY:

Couldn't perform daily activities	0	1	2	3	4	5	6	7	8	9	10	No limit in daily activities
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

CURRENT FUNCTION OF YOUR KNEE:

Can't perform daily activities	0	1	2	3	4	5	6	7	8	9	10	No limit in daily activities
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Thank you for taking the time to answer all the above questions which will prove very useful in helping us to assess your progress following surgery. If you have any comments which you feel we should know about then please write them in the box below or discuss with your surgeon in the clinic....

Comments...

The following pages will be filled in by your surgeon, you do **not** need to answer these questions...

**2000
IKDC KNEE EXAMINATION FORM**

Generalized Laxity:	q tight	q normal	q lax	
Alignment:	q obvious varus	q normal	q obvious valgus	
Patella Position:	q obvious baja	q normal	q obvious alta	
Patella Subluxation/Dislocation:	q centered	q subluxable	q subluxed	q dislocated
Range of Motion (Ext/Flex):	Index Side:	passive _____/_____/_____	active _____/_____/_____	
	Opposite Side:	passive _____/_____/_____	active _____/_____/_____	

SEVEN GROUPS	FOUR GRADES *Group				Grade			
Normal	A Nearly Normal	B Abnormal	C Severely Abnormal	D A	B	C	D	D

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

****Final Evaluation**

q q q q

- * 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.

Meniscal repair – Patient Assessment and Progress Sheet

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 goniometer 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 weight bearing 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.