SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

SECTION A: STUDY INFORMATION

Subject ID: ___ ___ - ___ ___ ___ - ___ **Study Visit:** _____

Site Number: ___ ___ ___ **Date:** ___ ___ / ___ ___ / ___ ___ ___ ___

Surgeon ID: ___ ___ ___

SECTION B: HISTORY

B1. Current medication use: (check all that apply)

❒ None ❒ Tylenol ❒ NSAID ❒ Narcotic ❒ Other _____

B2. Any problems wearing the brace?

❒ Too loose ❒ Too tight ❒ Irritating skin ❒ Other _____

B3. Has subject stopped wearing brace on a regular basis since last visit? ❒ Yes ❒ No

B2. What type(s) of treatment did patient undergo since last visit? (check all that apply)

❒ None
❒ Activity restriction
❒ Non-weight bearing crutches
❒ Non-weight bearing wheelchair
❒ Knee brace hinged, non-unloader
❒ Knee brace hinged, unloader
❒ Knee brace, immobilizer
❒ Cylinder casting
❒ Bone stimulator
❒ Physical therapy
❒ Other _____

B3. Has the patient had a complication or change in status since last visit? (Op or Non-Op)

❒ No ❒ Yes If the answer is "yes" for question B3, complete an Adverse Event Form.

SECTION C: PHYSICAL EXAM

C1. Height: ____ ____ inches **C2. Weight:** ___ ___ ___ lbs

C3. Generalized Laxity:

❒ Tight ❒ Normal ❒ Lax ❒ Not recorded

C4. Alignment:

❒ Obvious varus ❒ Normal ❒ Obvious valgus ❒ Not recorded

C5. ROM - Measured with an instrumented goniometer? ❒ Yes ❒ No

C6. ROM:

e.g. 10 degrees hyperxtension, 150 degrees flexion = 10 00 150

		(positive value)				(positive value)		
		Hyper	**Ext**	**Flexion**		**Hyper**	**Ext**	**Flexion**
a. INVOLVED:	Passive:	__ __	- __ __	- __ __ __	Active:	__ __	- __ __	- __ __ __
b. UNINVOLVED:	Passive:	__ __	- __ __	- __ __ __	Active:	__ __	- __ __	- __ __ __

SURGEON FOLLOW-UP

C7. EFFUSION:

a.INVOLVED

❒ None ❒ Fluid Wave (<25cc) (small) ❒ Easily ballotable (25-60cc) (moderate) ❒ Tense knee (>60cc) (large)

b. UNINVOLVED

❒ None ❒ Fluid Wave (<25cc) (small) ❒ Easily ballotable (25-60cc) (moderate) ❒ Tense knee (>60cc) (large)

SECTION D: ASSESSMENT

D1. Diagnosis – check all diagnoses and locations that apply

❒ Osteochondritis dissecans
- ❒ MFC
- ❒ MTP
- ❒ LFC
- ❒ LTP
- ❒ Patella
- ❒ Trochlea

❒ Focal Articular Cartilage Defects
- ❒ MFC
- ❒ MTP
- ❒ LFC
- ❒ LTP
- ❒ Patella
- ❒ Trochlea

D2. Relative Healing Status (with respect to last visit)

❒ Worsening
❒ Stable, Unchanged
❒ Improving

D2. Absolute Healing Status

❒ No appreciable healing
❒ Partally healed
❒ Completely healed

SECTION E: TREATMENT PLAN

E1. What is the treatment plan?

❒ Activity restriction – eliminate impact or painful activities
❒ Physical therapy
❒ Casting
❒ Bracing
❒ Restricted weight bearing
❒ Surgery (to be detailed at time of surgery on seperate form)

D2. Type of brace? (if used)

❒ Unloader
❒ Hinged knee
❒ Knee Immobilizer
❒ Other

D3. If brace was used, what company?

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

D4. If brace was used, what model?

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

D5. Was subject clearned to return to sports? ❒ Yes ❒ No

SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

IMAGING - MRI Classification (Page 1)

Was an MRI reviewed at this visit?

❒ Yes ❒ No

DATE OF MRI: __ __ / __ __ / __ __ __ __

If yes, complete this form. If no, please continue to next section.

Physical Characteristics
OCD or Focal Cartilage Defect

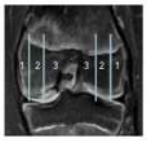
A. Location

❒ Medial femoral condyle
❒ Lateral femoral condyle
❒ Patella
❒ Trochlea

Mark zone(s) in which the lesion resides:

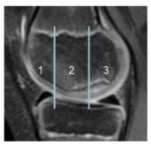
Coronal

❒ 1 Lateral- or medial-most
❒ 2 Central
❒ 3 Intercondylar



Sagittal

❒ 1 Anterior
❒ 2 Central
❒ 3 Posterior



B. Size

Measure maximal dimensions from bone edge to bone edge

Coronal

____ ____ Width of lesion (mm)

____ ____ Width of knee (mm)

____ ____ Maximum depth of lesion (mm)

Sagittal

____ ____ Width of lesion (mm)

____ ____ Width of knee (mm)

____ ____ Maximum depth of lesion (mm)

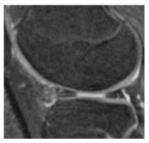
Other Knee Features
OCD or Focal Cartilage Defect

A. Physeal Patency

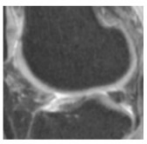
The status of the physis as seen on sagittal sequence only is:

❒ **Open**
Cartilage signal across entire femur

❒ **Closing**
Incomplete cartilage signal on any image



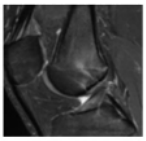
❒ **Closed**
No cartilage signal



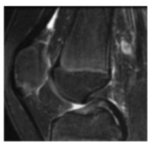
B. Effusion

The effusion seen within the knee is graded as:

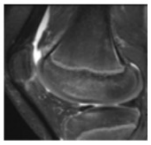
❒ **Grade 0**
Synovial fluid is not visualized superior to patella



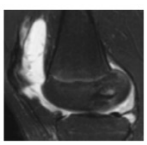
❒ **Grade I**
Synovial fluid is visualized superior to the patella, but the length of fluid layer < length of patella



❒ **Grade II**
Synovial fluid is visualized superior to the patella, but the length of fluid layer > length of patella



❒ **Grade III**
Length of fluid layer > length of patella and fluid layer is thick when (at least 3) serial images are compared.



SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

IMAGING - MRI Classification (Page 2)

Displacement
OCD only

Is the progeny *in situ*?

- ❒ Not at all (Skip remainder of page.)
- ❒ Partially
- ❒ Totally

Cartilage
OCD only

A. Thickness

The thickness of the overlying cartilage in comparison to adjacent cartilage is:

- ❒ Normal
- ❒ Thickened
- ❒ Thinned
- ❒ Variable

B. Contour

The contour of the articular surface is:

- ❒ Normal on all images (coronal and sagittal)
- ❒ Abnormal on any image (concave, convex, or both)

C. Breach

The cartilage at the periphery of the lesion is:

T2 Coronal

- ❒ Intact
- ❒ Not intact

T2 Sagittal

- ❒ Intact
- ❒ Not intact

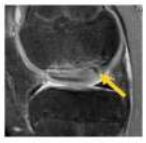
PD

- ❒ Intact
- ❒ Not intact

D. Omen

A radially-oriented, hypo-intesnse (or dark) signal in the epiphyseal cartilage is:

- ❒ Absent
- ❒ Present



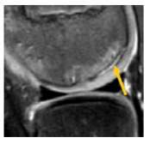
Interfaces
OCD only

If progeny bone is <u>not</u> present, then only answer A.
If progeny bone <u>is</u> present, then only answer B.

A. Parent Bone and Cartilage (Oreo Cookie)

Between the parent bone and cartilage, is there a "tri-laminar structure" with two hypo-intense layers on the outside (wafer) and a hyper-intense layer in between (creme)?

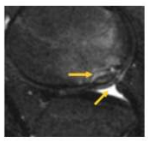
- ❒ No
- ❒ Yes



B. Parent Bone and Progeny Bone

Between the parent bone and progeny bone, is there an appreciable interface?

- ❒ No
- ❒ Yes, signal < fluid
- ❒ Yes, signal = fluid



SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

IMAGING - MRI Classification (Page 3)

Progeny Bone
OCD only

A. Visualization

Is bone appreciated within the progeny fragment?

❒ No (Skip remained of section. Go to Parent Bone.)

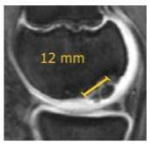
❒ Yes

B. Size

Measure progeny bone fragment (or entire congolomeration of bone fragments) for maximal dimensions on coronal and sagittal sequence:

Coronal

___ ___ (mm)



Sagittal

___ ___ (mm)

C. Fragmentation

Is the progeny bone fragmented?

❒ No

❒ Yes

Parent Bone
OCD only

A. Focal Linear Signal

A focal linear and distinct hyper-intense signal in the parent bone is:

❒ Absent

❒ Present

B. Focal Round or Oval Signal

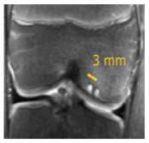
A focal round or oval hyper-intense signal in the parent bone is:

T2 Coronal

❒ Absent

❒ Present, single

❒ Present, multiple



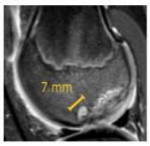
If present, measurement of largest focal area: ___ ___ (m)

T2 Sagittal

❒ Absent

❒ Present, single

❒ Present, multiple



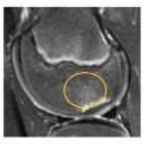
If present, measurement of largest focal area: ___ ___ (m)

B. Marrow Edema

The sagittal image with the greatest amount of edema in the parent bone demonstrates:

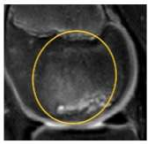
❒ None to minimal

< 25% of epiphysis involved



❒ Extensive

> 25% of epiphysis involved



SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

IMAGING - X-Ray Classification (Page 1)

Were X-Rays reviewed at this visit?

❒ Yes ❒ No

DATE OF X-RAYS: __ __ / __ __ / __ __ __ __

If yes, complete this form. If no, please continue to next section.

Location

OCD or Focal Cartilage Defect

❒ Medial femoral condyle
❒ Lateral femoral condyle
❒ Patella
❒ Trochlea

Bony Involvement

❒ Yes ❒ No

Size

OCD or Focal Cartilage Defect

A. Standing AP

____ ____ Width of OCD lesion (mm)

____ ____ Width of knee (mm)

____ ____ Maximum depth of lesion (mm)

B. Notch

____ ____ Width of lesion (mm)

____ ____ Width of knee (mm)

____ ____ Maximum depth of lesion (mm)

C. Lateral

____ ____ Length of OCD lesion (mm)

____ ____ Length of condyle (mm)

____ ____ Maximum depth of lesion (mm)

Characteristics of Parent Bone

OCD only

In comparison to the unaffected parent bone, the radiodensity of the rim of the parent bone is predominantly:

❒ More
❒ Less
❒ The same

Characteristics of Progeny Bone

OCD only

A. Visualization

Is the progeny bone visualized?

❒ No (Skip remainder of page.)
❒ Yes

B. Fragmentation

Is the progeny bone fragmented?

❒ No ❒ Yes

C. Displacement

Is the progeny bone in *situ*?

❒ Not at all (Skip remainder of page.)
❒ Partially
❒ Totally

D. Radiodensity

In comparison to the parent bone, the radiodensity of the *center* of the progeny is:

❒ More ❒ Less ❒ The same

In comparison to the parent bone, the radiodensity of the *rim* of the progeny is:

❒ More ❒ Less ❒ The same

E. Boundary

The boundary between the parent bone and progeny bone is

❒ Distinct ❒ Indistinct

F. Shape

The shape of the articular side of the progeny bone is: bone is

❒ Convex ❒ Concave ❒ Linear

SURGEON FOLLOW-UP

THE ROCK GROUP — PROSPECTIVE COHORT STUDY — FORM 4C

IMAGING - X-Ray Classification (Page 3)

Healing

OCD only

A. Radiodensity

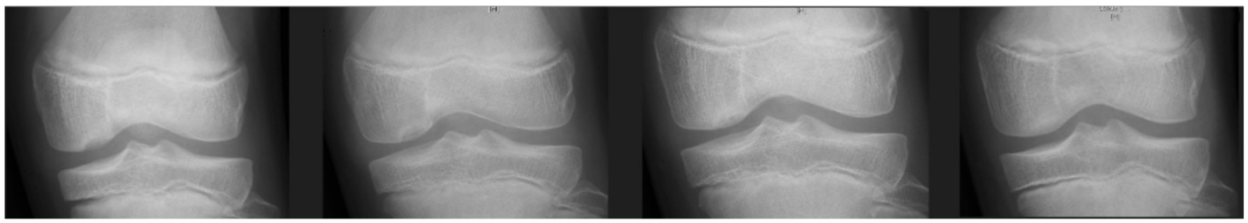
In comparison to previous radiographs (if available), the radiodensitry of the progeny is:

- ❒ More
- ❒ Less
- ❒ The same

Mark on continuum below, denoting the current stage of healing with respect to radiodensity:

Totally radiolucent
0%

Same radiodensity as parent bone
100%



B. Boundary

In comparison to previous radiographs (if available), the boundary is:

- ❒ More
- ❒ Less
- ❒ The same

Mark on continuum below, denoting the current stage of healing with respect to radiodensity:

Totally distinct
0%

Totally indistinct
100%