

TABLE E-1 Physical Examination Components

Physical Examination Component	Interpretation ¹⁸
Anterior drawer	ACL integrity (Grade I-III)
Lachman	ACL integrity (Grade I-III)
Posterior drawer	PCL integrity (Grade I-III)
Varus instability	LCL integrity (Grade I-III)
Valgus instability	MCL integrity (Grade I-III)
Effusion	Intra-articular fluid (none, trace, large)
McMurray test	Meniscal tear (lock or pain medial or lateral)
Joint-line tenderness	Meniscal pathology (medial or lateral)
Inspection	Soft-tissue injury (ecchymosis, abrasion, contusion)
Active range of motion	0° to 140°
Passive range of motion	0° to 140°

Table E-2. Physical Examination and MRI Data										
Case	Complete Awake	Knee pain	Ant drawer	Lachman	Post drawer	Varus instability	Valgus laxity	Effusion	McMurray's	Joint Line Tenderness
1	yes	yes	neg	neg	neg	neg	neg	neg	neg	medial-yes; lateral-no
2	yes	yes	neg	neg	neg	neg	neg	neg	neg	no
3	no	yes	neg	neg	neg	neg	neg	large	neg	no
4	no	yes	neg	neg	neg	neg	neg	neg	neg	no
5	yes	yes	neg	neg	neg	neg	neg	neg	neg	no
6	no	yes	neg	neg	neg	neg	neg	large	neg	no
7	yes	no	neg	neg	neg	neg	neg	large	neg	no
8	no	yes	neg	neg	neg	neg	neg	neg	neg	no
9	yes	no	neg	neg	neg	neg	neg	neg	neg	no
10	no	yes	neg	neg	neg	neg	neg	large	neg	no
11	yes	yes	neg	neg	neg	neg	neg	neg	neg	yes-lateral
12	yes	yes	neg	neg	neg	neg	neg	trace	neg	no
14	yes	yes	neg	neg	neg	mild	neg	neg	neg	no
15	yes	yes	neg	neg	neg	neg	neg	large	neg	yes-medial
16	no	yes	neg	neg	neg	neg	neg	large	neg	yes-medial
17	yes	yes	neg	neg	neg	neg	neg	neg	neg	no
18	yes	no	neg	neg	neg	neg	neg	neg	neg	no
19-R	no	yes	neg	neg	neg	neg	neg	neg	neg	no
19-L	yes	no	neg	neg	neg	neg	neg	neg	neg	no
20	yes	no	neg	neg	neg	neg	neg	neg	neg	no
21	no	yes	neg	neg	II	pos	neg	large	neg	no
22	no	yes	neg	neg	neg	neg	neg	neg	neg	no
23	no	no	neg	neg	neg	neg	neg	neg	neg	no
24	yes	no	neg	neg	neg	neg	neg	neg	neg	no
25	yes	yes	neg	neg	neg	neg	neg	neg	neg	no
26	no	yes	neg	neg	III	neg	neg	large	neg	no
27	yes	yes	neg	neg	neg	neg	neg	neg	neg	no
28	yes	yes	neg	neg	neg	neg	neg	large	neg	no

Table E-2. Physical Examination and MRI Data (continued)	
Ecchymosis/Contusion/ Abrasion	MRI findings
yes (ant abrasion)	mild femoral condyle bruise; partial PCL tear; soft tissue contusion
yes (lat abrasion)	anteromedial soft tissue contusion
abrasion	large effusion; proximal fibula and patella fx
abrasion	medial compartment marrow edema; partial LCL tear; increased popliteus signal; lateral subcutaneous edema
abrasion	tear post horn med meniscus; lateral soft tissue hemorrhage
medial ecchymosis	limited study; focal chondromalacia medial patellar facet
ecchymosis	tear post horn med meniscus
abrasion	partial tear ACL
no	soft tissue injury ant thigh
laceration and abrasion	contusion inf pole patella and mfc
lateral ecchymosis	large fluid collection laterally superficial to IT band
abrasion	partial PCL injury;moderate effusion; proximal tibial contusion; soft tissue swelling popliteal fossa
ecchymosis	NOT DONE DUE TO PRIOR TKA
multiple abrasions	moderate effusion; bone contusion anteromedial tibial plateau/lateral femoral condyle
superficial-abrasion	post horn med meniscus tear; small effusion; extensive soft tissue edema
ecchymosis	small suprapatellar effusion
no	small effusion; post horn med mensicus tear
ecchymosis ant knee	normal
ecchymosis ant knee	normal
abrasion/contusion	moderate effusion;tear post horn med and lat menisci; mfc bone marrow edema
ecchymosis/abrasion	LCL tear; MCL tear; lat meniscus tear; complex tibial plateau fx; patellar tendon tear
abrasion/10 cm laceration	quad tendon tear; proximal fibula fx
no	massive soft tissue injury to med and lat posterior knee
abrasion	tear ant horn lat meniscus;small effusion
abrasion	partial tear LCL;edema in popliteus;small effusion
abrasion	lat tib plateau fx with extension into PCL insertion
abrasion	PCL tear; partial ACL tear; MCL & LCL tear; massive soft tissue changes
abrasion	mod effusion; Baker's cyst; small PCL avulsion; ant tib plateau contusion