

TABLE E-1 Quantitative Relationships of the Osseous Attachments of the Superficial Medial Collateral Ligament to Other Medial Knee Structures

Relationship*†	Distance‡ (mm)
From femoral sMCL attachment to medial epicondyle	6.4 (3.9 to 9.6)
From femoral sMCL attachment to adductor tubercle	14.8 (7.5 to 18.9)
From femoral sMCL attachment to POL femoral attachment	11.1 (5.7 to 14.9)
From femoral sMCL attachment to adductor tendon attachment	14.4 (9.1 to 18.2)
From femoral sMCL attachment to medial gastrocnemius attachment	15.9 (10.7 to 21.1)
From femoral sMCL attachment to femoral joint line	26.8 (13.1 to 32.2)
From proximal tibial sMCL attachment to tibial joint line	12.2 (8.8 to 15.3)
From distal tibial sMCL attachment to tibial joint line	61.2 (52.4 to 70.5)
From distal tibial sMCL attachment to proximal tibial sMCL attachment	49.2 (41.7 to 55.9)
From distal tibial sMCL attachment to femoral sMCL attachment	94.8 (82.7 to 112.7)
From distal tibial sMCL attachment to lateral aspect to gracilis tendon attachment	19.5 (15.3 to 24.2)
From distal tibial sMCL attachment to anterior crest of tibia	35.7 (30.3 to 39.5)

*From the midpoint of the osseous attachment site to the corresponding medial knee structure.

†sMCL = superficial medial collateral ligament (tibial collateral ligament), and POL = posterior oblique ligament. ‡The values are given as the mean, with the range in parentheses.

TABLE E-2 Attachment Areas of Medial Knee Structures

Structure*	Attachment Site	Area† (mm^2)
sMCL	Femoral	94.1 (60.1 to 143.8)
sMCL	Tibial (proximal)	395.5 (241.4 to 612.5)
sMCL	Tibial (distal)	294.3 (212.4 to 356.8)
POL	Femoral	89.4 (52.8 to 200.9)
MPFL	Patellar	32.8 (20.3 to 49.7)
MPFL	Femoral	77.3 (55.4 to 113.7)
Adductor tendon	Femoral	111.7 (79.1 to 221.2)
Medial gastrocnemius	Femoral	66.6 (25.3 to 117.1)
Semimembranosus (direct arm)	Tibial	107.4 (69.4 to 166.0)
Semimembranosus (anterior arm)	Tibial	221.5 (104.7 to 609.2)

*sMCL = superficial medial collateral ligament (tibial collateral ligament), POL = posterior oblique ligament, and MPFL = medial patellofemoral ligament.

†The values are given as the mean, with the range in parentheses.

TABLE E-3 Quantitative Relationships of the Tibial Joint Line (Proximal Edge of Articular Cartilage of Medial Tibial Plateau) to Other Medial Knee Structures

Relationship*	Distance† (<i>mm</i>)
From tibial joint line to MT ligament tibial attachment	3.2 (1.8 to 5.9)
From tibial joint line to proximal tibial sMCL attachment	12.2 (8.8 to 15.3)
From tibial joint line to distal tibial sMCL attachment	61.2 (52.4 to 70.5)
From tibial joint line to anterior arm semimembranosus attachment	10.3 (7.8 to 14.7)
From tibial joint line to direct arm semimembranosus attachment	12.1 (9.2 to 14.9)

*MT = meniscotibial, and sMCL = superficial medial collateral ligament (tibial collateral ligament). †The values are given as the mean, with the range in parentheses.

TABLE E-4 Quantitative Relationships of the Osseous Landmarks of the Femur to Other Medial Knee Structures

Relationship*	Distance† (<i>mm</i>)
From medial epicondyle to MF ligament	15.1 (10.3 to 24.5)
From medial epicondyle to MPFL attachment	14.2 (6.9 to 18.8)
From medial epicondyle to medial gastrocnemius attachment	19.9 (17.5 to 23.7)
From adductor tubercle to MPFL attachment	3.0 (1.6 to 11.5)
From adductor tubercle to adductor tendon attachment	6.3 (3.5 to 7.5)
From adductor tubercle to medial gastrocnemius attachment	7.8 (5.2 to 14.7)
From gastrocnemius tubercle to medial gastrocnemius tendon attachment	4.8 (4.2 to 5.2)
From MF ligament femoral attachment to femoral joint line	15.7 (13.6 to 17.5)
Width of medial patellofemoral ligament on patella	16.0 (11.1 to 22.5)

*MF = meniscofemoral ligament portion of deep medial collateral ligament, and MPFL = medial patellofemoral ligament. †The values are given as the mean, with the range in parentheses.

TABLE E-5 Quantitative Relationships of the Femoral Attachment of the Posterior Oblique Ligament to Other Medial Knee Structures

Relationship*	Distance† (<i>mm</i>)
From femoral POL attachment to femoral joint line	25.1 (14.4 to 31.4)
From femoral POL attachment to medial epicondyle	16.5 (11.2 to 19.0)
From femoral POL attachment to adductor tubercle	10.7 (6.6 to 14.8)
From femoral POL attachment to femoral sMCL attachment	11.1 (5.7 to 14.9)
From femoral POL attachment to medial gastrocnemius tendon attachment	6.3 (4.2 to 9.0)
From femoral POL attachment to gastrocnemius tubercle	3.4 (2.6 to 4.6)

*POL = posterior oblique ligament, and sMCL = superficial medial collateral ligament (tibial collateral ligament). †The values are given as the mean, with the range in parentheses.