

Fig. E-1

Dissection photograph of the medial view of a left ankle showing the attachment positions of the superficial layer of the deltoid ligament. Three ligament bands of the superficial deltoid ligament were identified in this specimen and included the tibionavicular, tibiospring, and tibiocalcaneal ligaments.

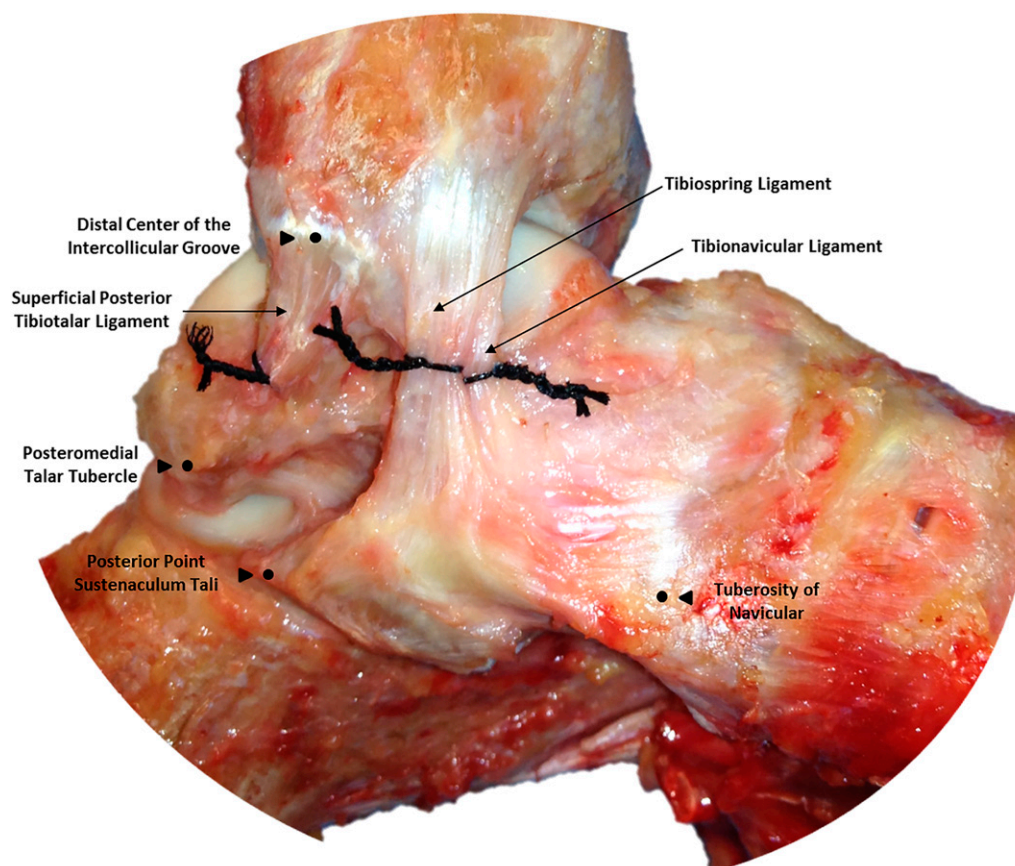


Fig. E-2

Dissection photograph of the medial view of a left ankle displaying the attachment sites of the superficial layer of the deltoid ligament. In this specimen, three ligament bands of the superficial deltoid ligament were identified and included the tibionavicular, tibiospring, and superficial posterior tibiotalar ligaments.

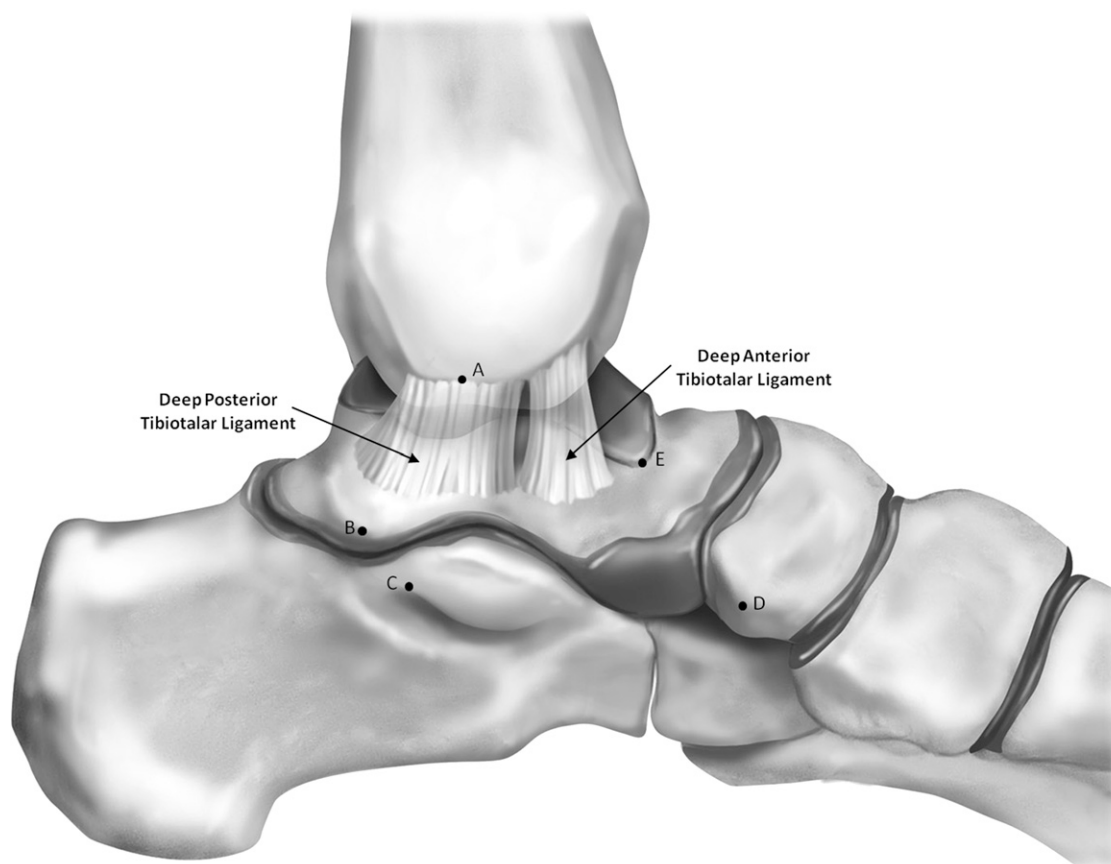


Fig. E-3

Illustration of the medial view of a left ankle showing the deep layer of the deltoid ligament and the anatomic attachment sites of the deep anterior and posterior tibiotalar ligaments. Surgically relevant osseous landmarks include: (A) distal center of the intercollicular groove, (B) posteromedial talar tubercle, (C) posterior point of the sustentaculum tali, (D) tuberosity of the navicular, and (E) anteromedial corner of the trochlea.

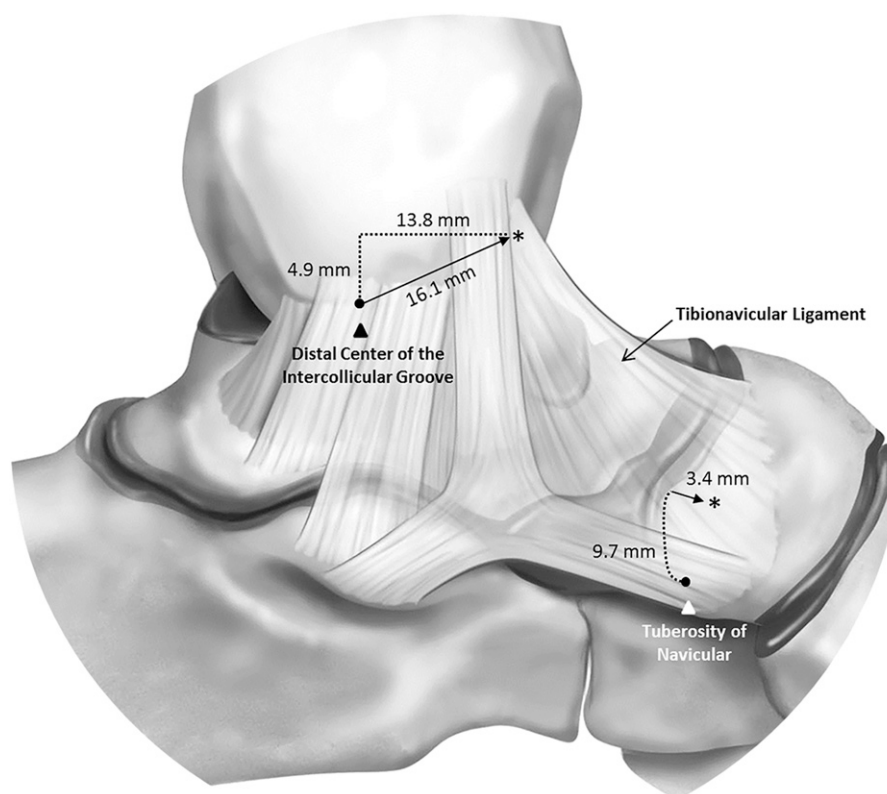


Fig. E-4

Illustration of the medial view of a left ankle showing the anatomic attachment sites of the tibionavicular ligament on the tibia and navicular. Its tibial attachment center was 16.1 mm (4.9 mm superior and 13.8 mm anterior) from the distal center of the intercollicular groove. Its navicular attachment center was 9.7 mm from the tuberosity of the navicular along the talonavicular joint line and 3.4 mm distal to the talonavicular joint space. Ligament attachment centers are marked with an asterisk.

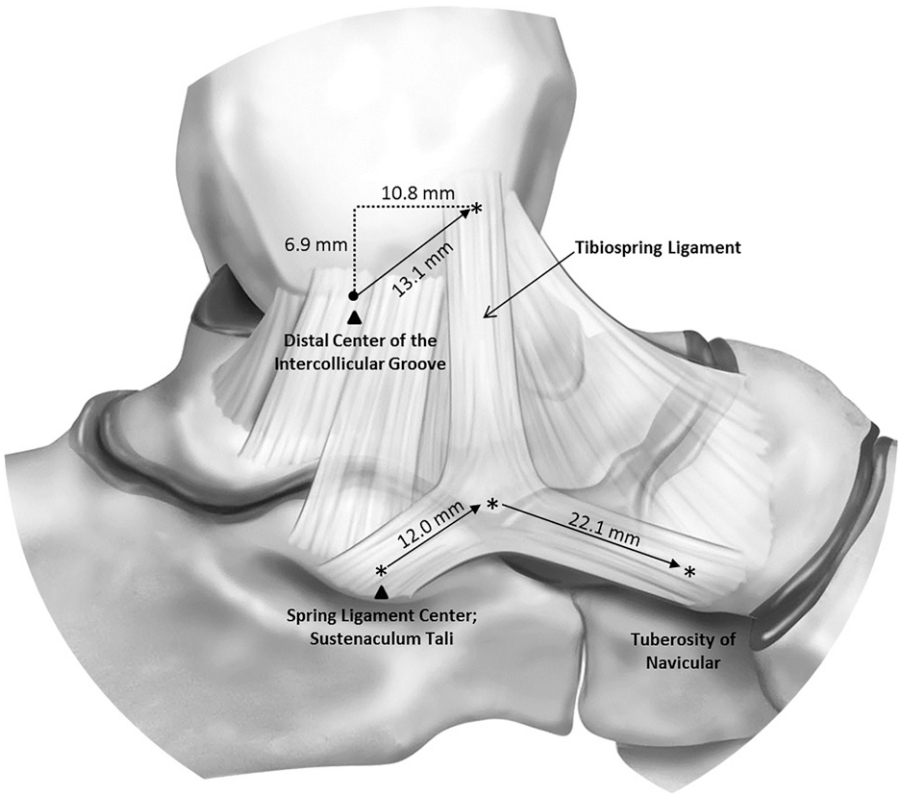


Fig. E-5
Illustration of the medial view of a left ankle showing the anatomic attachment sites of the tibiospring ligament on the tibia and spring ligament. Its tibial attachment center was 13.1 mm (6.9 mm superior and 10.8 mm anterior) from the distal center of the intercollicular groove. Its attachment on the spring ligament averaged 12.0 mm anterosuperior to the spring ligament's attachment center on the sustentaculum tali and 22.1 mm posterosuperior to the spring ligament's attachment center on the navicular. Ligament attachment centers are marked with an asterisk.

TABLE E-1 Comparison of the Prevalence of Individual Bands of the Deltoid Ligament in the Literature Between Previous Studies and the Current Study				
Deltoid Ligament Bands	Siegler et al. (1988) ³⁷ (N = 20)	Milner and Soames (1998) ²¹ (N = 40)	Boss and Hintermann (2002) ²³ (N = 12)	Current Study (N = 14)
Superficial layer				
Tibionavicular	20 (100%)	40 (100%)	0 (0%)	14 (100%)
Tibiospring	20 (100%)	40 (100%)	12 (100%)	14 (100%)
Tibiocalcaneal	—	6 (15%)	12 (100%)	11 (78.6%)
Superficial posterior tibiotalar	—	15 (37.5%)	6 (50%)	11 (78.6%)
Deep layer				
Deep anterior tibiotalar	—	4 (10%)	9 (75%)	13 (92.8%)
Deep posterior tibiotalar	20 (100%)	40 (100%)	12 (100%)	14 (100%)

TABLE E-2 Comparison of Deltoid Ligament Individual Band Lengths in Recent Literature and in the Current Study*

Band Lengths	Siegler et al. (1988) ³⁷	Milner and Soames (1998) ²¹	Boss and Hintermann (2002) ²³	Current Study
Superficial layer				
Tibionavicular	41.8 ± 4.9		—	33.6 ± 3.8
Anterior		28.5 ± 5.9		
Posterior		15.5 ± 4.4		
Tibiospring	18.6 ± 4.4	18.5 ± 6.3	24.3 ± 4.0	25.0 ± 3.5
Tibiocalcaneal	—	18.0 ± 7.7	25.6 ± 4.5	28.8 ± 4.7
Superficial posterior tibiotalar	—	14.0 ± 3.7	20.0 ± 4.3	21.0 ± 2.0
Deep layer				
Deep anterior tibiotalar	—	11.5 ± 3.6	16.1 ± 6.8	12.0 ± 2.9
Deep posterior tibiotalar	11.9 ± 4.0	9.5 ± 5.3	16.8 ± 5.6	10.3 ± 2.5

*The values are given as the mean and the standard deviation in millimeters.