

TABLE E-1 Distribution of Radiographs

| Age Group      | Anteroposterior Radiographs | Lateral Radiographs with Foot in Maximum Dorsiflexion | Lateral Radiographs* |
|----------------|-----------------------------|---|----------------------|
| Birth to <3 mo | 106                         | 111   | 0                    |
| 3 to <12 mo    | 61                          | 56  | 9                    |
| 12 mo to <3 yr | 21                          | 20  | 4                    |
| 3 yr to <7 yr  | 20                          | 12  | 14                   |
| 7 yr to <14 yr | 20                          | 6   | 17                   |

\*Lateral radiographs for the three-month to less than twelve-month age group were made with the child's foot in a neutral position with regard to the ankle joint. For the age group of twelve months to less than three years and the older age groups, the lateral radiograph was made with the patient standing and bearing full weight.

TABLE E-2 Observer Differences with Regard to Measurements Made on Anteroposterior Radiographs\*

|                            | Age Groups         |                    |                    |                    |                    |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                            | Birth to <3 Mo     | 3 to <12 Mo        | 12 Mo to <3 Yr     | 3 yr to <7 Yr      | 7 Yr to <14 Yr     |
| Talocalcaneal              | 6.63 ± 5.35 (0-25) | 6.27 ± 5.24 (0-25) | 5.68 ± 4.45 (0-17) | 4.53 ± 3.48 (0-13) | 3.53 ± 2.43 (0-9)  |
| Talus-first metatarsal     | 5.91 ± 5.15 (0-30) | 5.26 ± 4.52 (0-22) | 5.20 ± 3.84 (0-17) | 3.63 ± 2.52 (0-9)  | 4.13 ± 2.79 (0-10) |
| Calcaneus-fifth metatarsal | 5.06 ± 4.24 (0-22) | 4.31 ± 3.82 (0-21) | 3.93 ± 3.34 (0-16) | 3.93 ± 2.59 (0-10) | 3.73 ± 2.51 (0-13) |
| Number of radiographs      | 106                | 61                 | 21                 | 20                 | 20                 |

\*Data are presented as the mean and standard deviation in degrees, with the range in parentheses.

TABLE E-3 Observer Differences with Regard to Measurements Made on Lateral Radiographs and Lateral Radiographs with the Foot in Maximum Dorsiflexion\*

|   | Age Groups         |                    |                    |                    |                    |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | Birth to <3 Mo     | 3 Mo to <12 Mo     | 12 Mo to <3 Yr     | 3 Yr to <7 Yr      | 7 Yr to <14 Yr     |
| Lateral with foot in maximum dorsiflexion                                       |                    |                    |                    |                    |                    |
| Talocalcaneal   | 4.52 ± 3.64 (0-19) | 3.39 ± 2.85 (0-16) | 3.33 ± 2.89 (0-15) | 2.77 ± 2.34 (0-9)  | 2.44 ± 2.17 (0-7)  |
| Tibiotalar  | 4.18 ± 3.57 (0-19) | 3.05 ± 2.53 (0-18) | 3.86 ± 3.27 (0-14) | 3.50 ± 3.07 (0-12) | 4.22 ± 2.75 (0-10) |
| Talus-first metatarsal  | 4.64 ± 3.26 (0-17) | 4.14 ± 3.34 (0-18) | 4.60 ± 3.26 (0-13) | 3.44 ± 3.08 (0-13) | 3.77 ± 2.31 (0-8)  |
| Talohorizontal  | 3.77 ± 2.86 (0-14) | 3.10 ± 2.29 (0-11) | 3.06 ± 2.29 (0-9)  | 2.44 ± 2.10 (0-9)  | 2.88 ± 2.47 (0-8)  |
| Tibiocalcaneal  | 3.62 ± 2.98 (0-15) | 2.33 ± 2.04 (0-9)  | 1.76 ± 1.17 (0-8)  | 2.22 ± 2.19 (0-8)  | 1.88 ± 1.23 (0-4)  |
| Calcaneus-first metatarsal  | 4.28 ± 3.52 (0-21) | 2.50 ± 2.09 (0-10) | 3.23 ± 2.54 (0-4)  | 2.33 ± 2.26 (0-9)  | 1.66 ± 1.08 (0-4)  |
| Calcaneal pitch   | 3.30 ± 3.05 (0-14) | 2.09 ± 2.06 (0-9)  | 2.13 ± 2.34 (0-9)  | 1.77 ± 1.69 (0-8)  | 1.66 ± 1.53 (0-5)  |
| Lateral   |                    |                    |                    |                    |                    |
| Talocalcaneal   |                    | 3.33 ± 2.25 (0-9)  | 3.33 ± 2.61 (0-8)  | 4.05 ± 3.30 (0-12) | 2.31 ± 1.99 (0-9)  |
| Tibiotalar  |                    | 2.52 ± 2.34 (0-9)  | 3.33 ± 2.39 (0-8)  | 4.43 ± 3.22 (0-13) | 3.18 ± 2.39 (0-11) |
| Talus-first metatarsal  |                    | 4.15 ± 3.45 (0-13) | 3.67 ± 2.67 (0-8)  | 3.33 ± 3.03 (0-9)  | 3.49 ± 2.52 (0-12) |
| Talohorizontal  |                    | 3.26 ± 2.65 (0-9)  | 3.67 ± 2.53 (0-7)  | 3.05 ± 2.20 (0-8)  | 2.55 ± 1.85 (0-7)  |
| Tibiocalcaneal  |                    | 2.81 ± 1.78 (0-7)  | 3.00 ± 2.49 (0-8)  | 2.14 ± 1.88 (0-8)  | 1.69 ± 1.66 (0-7)  |
| Calcaneus-first metatarsal  |                    | 3.04 ± 2.55 (0-9)  | 4.83 ± 3.07 (0-9)  | 2.10 ± 1.51 (0-5)  | 2.27 ± 1.98 (0-9)  |
| Calcaneal pitch   |                    | 2.30 ± 1.59 (0-6)  | 1.33 ± 1.15 (0-4)  | 1.24 ± 1.16 (0-4)  | 1.37 ± 1.15 (0-4)  |
| Number of radiographs<br>(lateral with foot in maximum<br>dorsiflexion/lateral) | 111/0              | 56/9               | 20/4               | 12/14              | 6/17               |

\*Data are presented as the mean and standard deviation in degrees, with the range in parentheses.

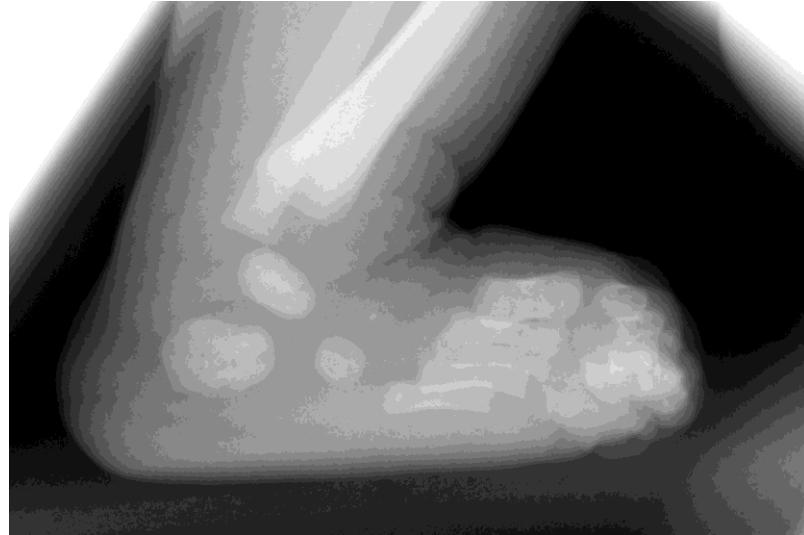


Fig. E-1

During exposure of this radiograph, the medial part of the forefoot was allowed to lift off as the great toe was being flexed, resulting in subsequent supination of the forefoot. This positioning error resulted in stacking of the metatarsals and elevation of the first metatarsal, which would have changed the talus-first metatarsal angle and the calcaneus-first metatarsal angle.



Fig. E-2

This radiograph was made with the foot in inversion, as indicated by the relationship of the long axes of the tibia and fibula to the long axis of the foot. This positioning error could have changed the talocalcaneal angle.