Table 15-2

Select Passive Range of Motion Findings of Child With Bilateral Clubfoot Deformities

Muscle Group	*Range of Motion*	
	Left	Right
Knee extension	20° hyperextension	20° hyperextension
DF, knee flexed	5° inverted 5° neutral	5° inverted 5° neutral
DF, knee extended	0° inverted 0° neutral	0° inverted 0° neutral
PF	15°	15°
Forefoot inversion	40°	40°
Forefoot eversion	0°	0°
Femoral anteversion	42°	45°
Transmalleolar axis	0°	0°
Hindfoot-thigh axis	5° internal	5° internal
Thigh-foot axis	35° internal	30° internal

Table 15-3

Stride Characteristics of Child With Bilateral Clubfoot Deformities

Variable	
Velocity (m/min)	59 (91% N)
Cadence	177 (115% N)
Step length (m)	Left = 0.34 (56% N) Right = 0.32 (52% N)
Double limb stance (% GC)	24 (120% N)
Single limb stance (% GC)	Left = 37 (93% N) Right = 39 (98% N)

During gait, excessive intoeing (Figure 15-6A) was compensated for by excess external hip rotation (Figure 15-6B). Increased hip abduction in swing was necessary for foot clearance (Figure 15-6C). Five of the functional factors related to over correcting the initial equinus. The onset of calf muscle activity was delayed until terminal stance on the left and mid stance on the right. This was consistent with the excessive DF documented for the left ankle and the bilateral delay in heel rise. The resulting shortened step length (~55% normal) was accommodated by a fast cadence