

Lift history

First prosthesis:

Prosthetist: Gerry (sp?) at APO

Age: 11 months – after child pulling to stand and walking on shorter leg.

Concept: “Remove weight from the bones of the leg/foot and transfer bearing to hip and skin.”

Design: clamshell, fixed, molded, toe-to-mid-thigh (higher than the knee), two straps over hip/waist to keep lift secured. **No foot-plate** – weight not supported by sole of foot, but skin of foot, ankle, lower leg, ...

Mobility: Poor – could stand in one place and move slightly

Health: caused bruising up and down upper and lower leg, skin abrasions at top edge of prosthesis despite a heavy sock, addition of moleskin, and adjustments by prostheticist.

Cost: \$5500 – paid by insurance (we paid \$500)

Excuses from Prostheticist team: “Some redness is normal,” “I talked to another prostheticist who is an expert in PFFD at a conference – he’d have done the same thing” , No I didn’t review her MRI, but with PFFD the foot and lower bones are not well formed,” “Give her some time to get used to it”

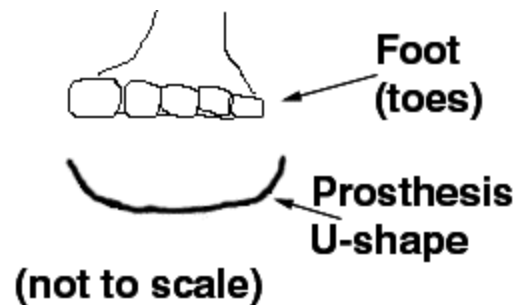
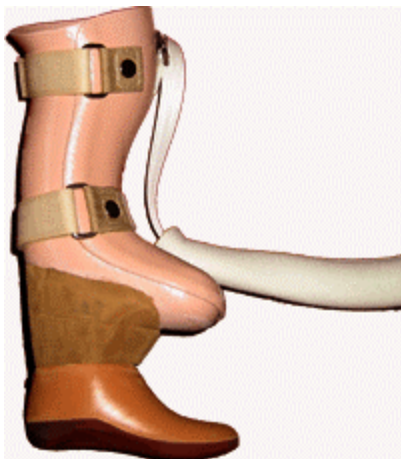
Overall Opinion: Complete failure in design, concept, and mobility.

Personal Opinion: Not suitable for printing.

Returned: Yes.

Breathable: No.

Image 1: First prosthesis – rejected.



Second Prosthesis:

Prosthetist: None: Went to shoe repair shop with child’s low-rise sandal/shoe

Age: 13 months

Design: put lift of lightweight crepe on children’s shoe

Concept: use fully functional foot, ankle, tibia/fibula, knee normally

Mobility: Good –could walk, but had ankle instability

Health: No adverse effects – ankle instability and frequent falls

Other Negatives: Each shoe would have to have a new lift added.

Cost: \$35 for lift + cost of shoe.

Overall Opinion: Ok, but awkward to put on and keep on. Ankle instability worrisome

Third Prosthesis:

Prosthetist: Andy at APO

Age: 14 months

Foot Sizes: 4-5

Design: shoe lift of hollow, light-weight crepe that straps onto child's shoe. Shoe is a "high-top" toddlers shoe.

Concept: same as above – but separate shoe from lift allowing shoe changes independent of lift.

Mobility: Excellent. Ankle stability provided by high-top shoe. Easy on/off. Could move well for toddler stage.

Health: No adverse effects – less ankle instability

Cost: None: Don at APO's promise to "make it up to us" for first prosthesis.

Images/Movies:

Image 2: Learning to Walk with Third Prosthesis



Fourth Prosthesis:

Prosthetist: Andy at APO

Age: 20 months

Foot Sizes: 5-5 ½

Design: Same as above: Larger/higher shoe lift of hollow lightweight crepe that straps onto child's shoe. Shoe is a "high-top" toddlers shoe.

Concept: same as above – add hip support with neoprene support

Mobility: Excellent. Ankle stability provided by high-top design. Easy on/off. Could run, dance, skip, launch off of chair onto couch arms,

Health: No adverse effects, blister on toe of shorter leg if socks/shoes not secured well. Callous developed on big toe of shorter leg.

Cost: None: APO's promise to "make it up to us" for first prosthesis.

Other negatives: As the leg-length-length discrepancy became larger the device became heavier. As lift was higher – had more Medial-Lateral (ML) instability.

Fifth Prosthesis:

Prosthetist: Noel at Chladek Prosthetics

Age: 25 Months,

Foot Sizes: 5- 6 ½

Design: Ankle Foot Orthosis (AFO) that rises to mid-calf. Has a flexible ankle using nylon hinges. Uses carbon-fiber made to be flexible. Carbon-fiber posts provide strength, height and lightness. Instead of metal hardware to set height of lift – used 100% carbon fiber for additional lightness

Mobility: Excellent. Kicks balls, jumps on trampoline walks quickly, w/in one hour of wearing the new lift. Two days later: runs down slopes, pulls ropes hard, stands on one leg (the one with the lift), climbs fences, leans at all angles.

Health: No adverse effects, no blisters or redness even after wearing all day with extreme activities.

Other negatives: None.

Sixth Prosthesis:

Prosthetist: Chladek Prosthetics. (Not Noel, training a new person)

Age: 2.5 years

Foot Sizes: 6 ½

Design: same as above

Issues: Flexible carbon fiber bits are too stiff – hinges overbuilt – wings not as flexible as before. R cries that it hurts when trying to put on lift.

Seventh Prosthesis:

Prosthetist: Noel at Chladek Prosthetics

Age: 2.5 years

Foot Sizes: 6 ½ - ...

Design: Same as above: Ankle Foot Orthosis (AFO) that rises to mid-calf. Has a flexible ankle made of nylon hinges. Uses carbon-fiber with different flexibilities. Instead of metal hardware to set height of lift – used 100% carbon fiber for additional lightness. Additiona

Mobility: Excellent. Kicks balls, jumps on trampoline walks quickly, runs, helps to put on the lift, carries awkward and heavy objects, climbs slides up the slippery side of slides, unstoppable in any terrain.

Health: No adverse effects, no blisters even after wearing all day with extreme activities. Originally some small red-spots which we identified as being caused by the straps not being tight enough (foot slipping), some padding needing to be added, and needing a smooth web added at the ankle to prevent pinching of the skin at the ankles. Physiatrist noted that ankle flexibility and strength remarkable.

Other negatives: None yet.



Image 3: 7th Prosthesis