

Case Study 8: Fionna

Child's age, weight, height

4 year old female, 34 pounds, height not available

Medical Diagnosis/condition

Fionna has a diagnosis of Pentalogy of Cantrell, which is a very rare condition characterized by the absence of a sternum and accompanying ribs resulting in Fionna's heart and lungs being completely exposed. She also has a large omphalocele and a tracheostomy.

Reason for referral

Fionna had outgrown the rear-facing limits of her current child safety seat with customized harness. Due to her medical condition, Fionna's medical team felt she needed a restraint that would allow her to remain rear facing in order to minimize harness pressure on her chest in the event of a crash.

Current child safety restraint

Fionna had a Britax Marathon with a customized harness, developed especially for her by an engineer at the company. The seat allowed her to stay rear facing to 33 pounds and the harness diverted direct pressure from her chest.

Other child passengers and restraints

None

Vehicle Year, Make and Model

1999 Chevrolet Montana

Child's Seating Position in Vehicle (X)

D		
		Fionna

Issues with Vehicle

None

Evaluation

Upon evaluation it was noted that Faith had reached the rear-facing weight limit of her current car safety restraint, yet for medical reasons she still needed to be rear facing.

Recommendation

The Britax Two-Way Plus, a Swedish child safety seat, was recommended as it allows a child ride rear facing to a higher weight (50 pounds) than any restraint currently available on the U.S market.

Intervention

Special permission was obtained from the National Highway Traffic Safety Administration to purchase the Britax Two-Way Plus. The child safety seat was sent to the United States by a friend of the medical director of the Automotive Safety Program, along with instructions translated into English. A former Britax engineer on staff with the Automotive Safety Program and an occupational therapist fitted and installed the car seat in the family's car. Adaptations to the harness system were not necessary, due in part to the fact the seat met European standards and therefore did not come with a chest clip



Occupational therapist adjusting harness of Britax Two-WayPlus.