



Clothing Design for Conjoined Twins

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Design, medicine

Help is Needed

In October of 2011 I was contacted by a care coordinator at the VCU Medical Center to assist in the care of conjoined three-year-old twins Maria Terese and Terese Maria Sanati. As with most great opportunities, time was of the essence. The World Pediatric Organization had flown Maria Terese and Terese Maria to Richmond, VA from their home in the Dominican Republic along with their mother Lisandra Sanati. Surgeons from the VCU Medical Center were readying the twins for a major separation surgery and some of the initial operations had created a situation that required a non-medical intervention. Clinicians needed special clothes for the girls, and STAT.

Project Parameters

After discussing the case with Ruth Trivelpiece, RN and coordinator of craniofacial services at VCU Health Systems, I agreed to work with the confidential project and was cleared to receive pictures of the twins. The girls were omphalogenous twins meaning they were joined at the front of the body, face to face with shared liver, bile ducts and intestines. To make accurate garments, a designer needs measurements and in the case of conjoined twins, standard size and fit did not work. Understanding the girls shared anatomy and their physical interactions with one another was critical. After reviewing pictures, I met with VCUarts sculpture senior and pre-med student Morgan Yacoe who had created a plaster model of the twins' torsos to assist the medical team with their surgical planning. Access to the body cast was critical as accurate measurements of the conjoined anatomy could be made. The element of time was even more present. The surgery to place inflatable saline bags under the skin of the girls' torsos had created a situation where the incision sites were sore, itchy, and constantly uncomfortable from the pressure of inflation. Three year olds do not stop itching and picking at scabs and this skin was especially uncomfortable as the bags were inflated to stretch skin for reconstructive surgery. All the clothing the girls were wearing, rode up over their joined anatomy, exposing their sides and shared bellies, and site of the incisions and expanders.

Design Process

I received a call on a Monday morning, saw images of the girls that afternoon and measured the body cast on Wednesday. Monday night (after the call) I drafted numerous versions of garments with shared fronts. Tuesday and Wednesday I tested a few of my ideas in fabric and shoved two children's mannequins together to test the fit. I created dresses since regular pants and skirts fit the girls' fine under their joined abdomens. A dress would also be able to cover the incision site and have a significant flare to encompass the growing saline expanders. Wearable garments needed to be created ASAP so I sent out a workshop call for a service project and asked design major Anna Johnson to help true patterns of the garment styles I had developed. After three days of constant tweaking, we had patterns ready for Friday mornings' workshop. A group of 10 students spent Friday cutting out fabrics, stitching, finishing, and embellishing garments. On Monday, we delivered four finished outfits to Ruth at the hospital. The clinical staff reported that the girls and mom were ecstatic, dragging visitors into their room to pull their "dresses" out of the drawers. We were able to produce an additional two dresses as well as a Halloween costume for the girls.

Fashion as an Ally to Healthcare

While dresses are not considered as medical devices, our ability to jump into action and provide for an unusual medical need became a positive part of the Sanati twins treatment plan. Incision sites were protected, soft knit fabric allowed independent movement and comfort, and, a degree of normalcy was reached during a difficult time. Providing fashionable, protective clothing brightened the day for these girls and their mother. Additionally, it provided students a rare chance to put their drafting and construction skills into practice. The Sanati twins are thriving, and our small part in their story can be seen in the Discovery Channels full-length documentary, *Separation Anxiety*, Figure Eight Films, January 2012.

Postscript

In November of 2012, I received a phone call from Ruth Trivelpiece at VCU Health Systems, "Guess what? She said, "We have another set of twins" I am currently coordinating garments for a pair of omphalogenous conjoined twins born in October of 2012. My students are creating dresses that can accommodate skin expanders, and dresses and jackets for the children to wear home from the hospital. In the case of these clients, clinical staff and doctor's have marveled at how invested the children's mother has become with being able to dress her fragile babies. The simple normal act of dressing up a baby has provided one place where hospital monitors, feeding tubes and protocols have given way to a daily ritual. This young mother dreams of all the cute outfits she will find for her soon to be separated babies, instead of the difficulties of spending half a year in a hospital room.