



Case Study: 7-year-old Patient Avoids Line Trauma & Experiences Reduced Dressing Changes with Central Line Vest

Gus Gear's® Central Line Vest reduced frequency of dressing changes and prevented line trauma (dislodgement and breakage) while improving quality of life for patient and family.



An internationally recognized academic medical center in Texas provides nutritional therapies to pediatric patients suffering from conditions that require intravenous total parenteral nutrition (TPN). Part of their commitment involves seeking solutions to address central venous access device (CVAD) damage and/or removal caused by line trauma.

Challenge

As much as 30% of pediatric patients who require TPN suffer CVAD trauma, reducing their quality of life and burdening them — and the healthcare system — with undue financial burden. Their active lives and curious fingers cause damage in the form of breakage and dislodgement, requiring repair or replacement. Current standards of care do not adequately address full securement of CVAD's from exit site to the hub.

Patient

This 7 year-old patient was diagnosed shortly after birth with Megacystis Microcolon Intestinal Hypoperistalsis Syndrome (MMIHS). A Broviac central catheter was placed to administer TPN and other therapies. Early on, due to scratching and touching, they started to require frequent central line dressings. The caregivers and parents were concerned about the potential for line dislodgement and breakage.

Solution

Given the dressing problems and potential for line trauma, the team utilized the Gus Gear® Central Line Vest (CLV), an FDA -registered Class I Exempt medical device that employs a unique patent -pending securement technology. This technology uses flexible strapping contained within a covered vest-like device. It secures the device from the CVAD exit site to the hub.

Outcome

After seven years using the Gus Gear® Central Line Vest, dressing changes have been dramatically reduced, only one small repair has been recorded. Parents report their daughter being able to participate in normal activities such as recess, physical education, and playing at the park with no line breaks or dislodgement, giving them much-needed peace of mind.