


ELASTO-GEL™: A PRODUCT WITH UNIQUE PROPERTIES ESPECIALLY SUITED FOR THE TREATMENT OF INFANTS AND CHILDREN WITH SPECIAL NEEDS

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Micro-preemies, newborns with birth defects, infants with acute infections and children with graft versus host disease present the challenge of open lesions or maintaining integrity of fragile tissues. Treatment frequently entails use of medications, adaptive equipment, specialized dressings, and prevention of secondary complications or deformities for these infants and children. Inhibitive casting, splinting, air or foam play and sleep surfaces have traditionally been used. Elasto-Gel™, added to the previous modes of intervention, has reduced friction and pressure injuries maximizing recovery, decreasing hospital stay, and preventing secondary deformities.

Medical conditions successfully treated with Elasto-Gel™, in addition to traditional methods, include: Epidermolysis Bullosa, Unrepairable Myelomeningocele, Osteogenesis Imperfecta, Bilateral Cleft Lip/Palate, Meningococcal disease requiring fasciotomies, Graft versus Host disease, Frostbite with digital webbing, Encephalocele with Anencephaly, Dandy Walker Syndrome, and Gastroschisis.

Conclusion: Medical Staff and families have stated they found Elasto-Gel™ easier to use than other products including creams, skin barriers, and other types of occlusive dressings when treatment or preventative measures were required under casts, splints, tracheostomy ties, or tubing and pouches which can damage delicate tissues.

Elasto-Gel™ has proven to be an effective versatile product applicable to a wide variety of complex difficult conditions of infants and children with unique medical needs while being acceptable to the children and families and enhancing the quality of life.

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ELASTO-GEL™: A PRODUCT WITH FOR THE TREATMENT OF INFANTS

INTRODUCTION

Micro-preemies, newborns with birth defects, infants with acute infections and children with graft versus host disease present the challenge of open lesions or maintaining integrity of fragile tissues. Treatment frequently entails use of medications, adaptive equipment, specialized dressings and prevention of secondary complications or deformities for these infants and children. Inhibitive casting, splinting, air or foam play and sleep surfaces have traditionally been used. Elasto-Gel™, added to the previous modes of intervention, has reduced friction and pressure injuries maximizing recovery, decreasing hospital stay, and preventing secondary deformities.

MEDICAL CONDITIONS SUCCESSFULLY TREATED WITH ELASTO-GEL™:

- Epidermolysis Bullosa
- Unrepairable Myelomeningocele
- Osteogenesis Imperfecta
- Bilateral Cleft/Lip Palate
- Meningococcal Disease Requiring Fasciotomies
- Graft Versus Host Disease
- Frostbite With Digital Webbing
- Encephalocele With Anencephaly
- Dandy Walker Syndrome
- Gastroschisis

CASE STUDY 1



Born full term with bilateral cleft lip and horseshoe palate. Required tracheotomy as infants are nasal breathers and lip displacement obstructed respiration.

Plastic surgeon recommended a logan bar, so we created one small enough using T-foam as the basis, Elasto-Gel™ next to skin surfaces, and covered with mole skin with the bar held in place by adjustable elastic straps.

Lateral corrections were made first followed by anterior-posterior alignment allowing surgical correction of lip (palate repaired at 2 years of age).

SUMMARY

Medical staff and families have stated they found Elasto-Gel™ easier to use than other products including creams, skin barriers and other types of occlusive dressings when treatment or preventative measures were required under casts, splints, tracheostomy ties or tubing and pouches which can damage delicate tissues. Elasto-Gel™ has proven to be an effective versatile product applicable to a wide variety of complex difficult conditions of infants and children with unique medical needs while being acceptable to the children and families and enhancing quality of life.

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CASE STUDY 2



Full term infant born with small gastroschisis with matted intestines exposed and attached by thin peduncle.

Other medical problems precluded immediate surgical repair and there was concern that peduncle would rupture as well as concern of fluid loss and risk of sepsis.

Elasto-Gel™, sterile gauze and an orthoplast cone attached with straps to body protected the area and allowed handling by family and varied positioning until surgical repair.

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CASE STUDY 3



Full term infant born with malformation of entire vertebral column and sac at thoracic-lumbar area; mild hydrocephalus managed by upright positioning. Myelomeningocele considered unrepairable due to extensive vascular supply and severity of vertebral malformation.

Family elected to take child home with the desire that he be an active participant in daily life such as going to the grocery store and playing with sibling in the backyard.

Car seat and infant seat were modified by using an insert made from constructa-foam covered with 1/2" T-foam, 1/2" Elasto-Gel™ which was covered with vinyl.

Repaired at one year of age and now above average intelligence and walks with long-leg braces and crutches.

CASE STUDY 4



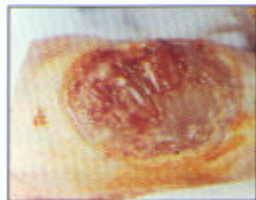
Full term infant with severe osteogenesis imperfecta.

Experienced more than 50 fractures prior to delivery with many healing at +90 degree angles in utero.

Elasto-Gel™ used to line cradle, car seat, including straps and buckles, and over parts of toys to reduce the risk of fractures while allowing active participation in family life.

Cognitively gifted and mobile in electric wheelchair.

CASE STUDY 5



The tissue thin skin of the "micro-preemie" is subject to injury by tape, electrodes and the gloved hands of caregivers. Lack of subcutaneous tissue frequently results in direct exposure of muscle and bone following trauma to the skin as occurred with this tape burn. Use of Elasto-Gel™ can provide a protective covering to minimize additional breakdown, reduce risk of infection and prevent fluid loss. Following the removal of several ribs and a muscle transfer to the chest from the back Elasto-Gel™ protected the area during initial healing of the surgical site. The Elasto-Gel™ pad usually adheres to the infant adequately. Coban can be used if additional stabilization is necessary.

CASE STUDY 6



Full term infant with anencephaly and large encephalocele.

Large encephalocele made bathing, handling difficult.

Elasto-Gel™ offered "comfort only" while infant survived for several months.

CASE STUDY 7



Dandy-Walker syndrome results when the cerebellum fails to develop and is replaced by a fluid filled sac which may vary in size from minute to very large and protruding from the base of the skull. When the cerebral spinal fluid in the sac does not communicate with the ventricular system of the brain the sac can be surgically removed and the child may go on to have normal development. Protection of the sac to prevent rupture and risk of infection is essential during diagnostic phases and prior to surgery. Use of T-foam padded with Elasto-Gel™ and insulated with 3M Thinsulate has worked well to protect the sac while allowing CAT scan, MRI or X-ray and to position the child in a comfortable manner pre- and post-operatively.

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