Sample Case

Motor Vehicle Roll Over

Prepared for:
Attorney at Law

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Contents of Report

Sample Case Birth Date: 4/10/97

S—K—Medical Record Review Date of Injury: 8/6/99

Allergies: None

Social History: 2 year old living with mother

Past Medical History:

- VACTERL Syndrome
- Developmental Speech Delay
- Encephalomalacaia (destruction of neonatal brain)
- Global Developmental Disability
- Aphonia (loss of speech/sounds)
- Patent Ductus Arteriosus
- Butterfly Vertebrae T9
- Un-descended Testicle (treated / resolved 1997)
- Spina Bifida Oculta
- Vertebral anomalies, including partial fusion of T9-T10 (diagnosed 1997 continued)
- Bilateral Inguinal Hernias (treated 1997-resolved)
- Heart Murmur (continued)
- Cleft Palate repaired

Diagnosis associated with the accident / Clinical Findings during course of hospitalization

Primary Diagnosis:

- MVA Closed Head Injury; comatose – resolved; questionable ongoing deficits.
- Fracture of the left olecranon (elbow)- resolved 11/99
- PEG tube (Gastrostomy Tube removed 9/99
- Elbow Fracture – required surgical alignment 8/30/99 - resolved 11/99
- Scalp Laceration – resolved 10/99
- Estropia left eye – resolved 11/99
- Aphasia – resolved 11/99
- Developmental Delay – questionable
- Gait abnormalities / Ataxia – new 10/99 continued but improving
- Aphonia - continued but improving.
- Skull Fracture – resolved 11/99
- Close Head Injury - ?
- Intracranial Hemorrhage – resolved 11/99
- Epidural Hematoma – resolved 11/99
- Multiple cuts and abrasions - resolved

Secondary Diagnosis:

- VACTERL Syndrome - ongoing
- Developmental Delay - ongoing
- Vertebral anomalies – ongoing
- Patent Ductus Arteriosus – ongoing
- Otitis Media (resolved) 10/99
- Sinus Infection (resolved) 10/99
- Scabies (resolved) 11/99

Summary of Events:

On 8/6/99 S.K., was a 2 year old, male passenger who was ejected from van in a high speed roll-over. He was found unconscious about 10 feet from the vehicle by Cal Star Emergency Services. Following airway maintenance and stabilization, he was emergently transported to SJ Medical Center, in S J Arizona, where he was assessed and evaluated by Dr. G. Emergency Room Physician. Dr. G documented concerns, in regard to respiratory status and immediately placed S.K.on a ventilator and performed ongoing airway and neurological assessments. Paralytic medication and sedation was required and S. K. underwent numerous cervical and lumbar X-rays which were interpreted by Dr. J. Radiologist who noted that there was a C1-C2 abnormality however documented that he was not able to clearly define the abnormality. CT scan of the head, interpreted by Dr. J, revealed an intracranial hemorrhage and small epidural hematoma along with multiple cuts and abrasions were cleansed and dressed along with a large scalp laceration that required suturing. A second trauma service physician, Dr. L, was summoned for assistance. Dr. L's assessment findings revealed unknown baseline and a history of questionable developmental delay and noted that S. K. was unable to verbalize with the exception of occasional cry and requested neurosurgery consultation which was performed by Dr. B, Neurosurgeon. He noted that S. K. was arousable to noxious stimuli however unable to focus or track. He felt S. K.'s pupils were equal however right was sluggish, irregular without change in corneal reflex and that he was able to move all extremities. Concerned over swallowing and gag reflexes and S. K. inability to cooperate a second Head CT Scan was obtained, which revealed a persistent left parietal contusion with a small midline shift. Once stabilized, S. K. care was transferred to Dr. Pediatrician and he was directly admitted to the pediatric intensive care unit, in critical condition, with a diagnosis of: Closed head Injury, multiple Skull Fractures and an epidural hematoma. Dr. B inserted an ICP bolt to monitor for intracranial pressure.

Early the next morning, 8/7/99 Dr. M's assessment findings revealed again that S. K. continued to be difficult to arouse, he had a disconjugate gaze and arched / stiffened his back. He felt he had diminished neuro status however also questioned his history and baseline status. Repeat, X-ray of the left arm revealed which revealed an olecranon fracture of the proximal ulna.

On 8/8/99, Dr. B's Neurosurgery follow-up revealed that S.K. would open his eyes at time, however now his pupils were constricted, right pupil again sluggish. He had positive for corneal reflex and gag reflex and was able to move all extremities. Repeat Head CT revealed no change. Dr. B's examination findings revealed a congenital spinal defect as well as a congenital abnormality of the ductus arteriosus suggestive of patent ductus arteriosus. He noted scaring in the groin and anal region suggestive of previous surgical intervention. Dr. S. L. documented that mother had reported that there was some question as to developmental delay, which he felt was difficult to determine due to the extensive head injury. Dr. S.L. concluded there was a definite decrease in mental status most likely due to the MVA, multiple skull fractures. He felt S. K.

condition continued to be critical. S—K—remained in the Pediatric Intensive Care Unit, with continued intracranial pressure monitoring and ventilation support. Dr. B consulted by phone with Dr. F. Pediatric Neurosurgeon.

Dr. F, Pediatric Neurosurgeon arrived at 1:00 a.m. now 8/9/99 for consultation. He felt "overall" that S—K—was stable although his intracranial pressure was liable. He noted that S—K—had become agitated when not sedated, aroused to touch, opened his eye periodically however was concerned with the fact that his pupils were constricted, right pupil more sluggish than the left. Dr. B noted a positive corneal reflex and a positive gag reflex and that he was able to move all four extremities which he felt was a “good sign. A repeat CT of the Brain was ordered which confirmed a persistent left parietal contusion with a small midline shift, he felt was consistent with the previous Head CT. Dr. F. concluded he was neurologically stable however remained critical.

S—K—continued to be critical , requiring constant medical and nursing staff monitoring in the ICU for the next 4 days. A PEG (percutaneous esophageal gastrostomy) tube was inserted for nutrients. Through this time period his arousal was minimal, he did not speak or move on his own. His vital signs were within stable ranges and his pupils remained sluggish on the right.

A telephone call to Dr. B from the nursing staff on 8/11/99 revealed that S—K was more alert, he was "jabbering" and prompted reassessment. Promptly, Dr. B examined and found S—K was responsive to noxious stimuli, his pupils were now equal although his right pupil remained sluggish and was irregular as compared to the left. He was able to move all four extremities however there was some increased swelling at the left elbow. Dr. B ordered a repeat left forearm x-ray which confirmed the olecranon (elbow) fracture had not changed from the previous film and Orthopedic Consultation was requested. Dr. O, Orthopedic Surgeon assessed and evaluated the fracture site, performed alignment and felt it should be immobilized for the time being and re-evaluated for casting or possibly surgical intervention, as soon as S. K. was stable.

By 8/12/99 S—K was noted as arousable but somewhat drowsy. He could not focus or track. His speech was undecipherable, occasionally he would cry. OT attempted to evaluate him however they were unable to complete an evaluation due his lack of cooperation. Physical Therapy assessments revealed a history taken by S—K's grandmother which included multiple birth anomalies, a questionable developmental delay which again raised questions as to S—K's prior level of function. Interview with his mother, who also remained hospitalized, revealed he previously was running, walking and playing however his speech lagged to that of her other children at this age. At birth he was diagnosed with Vater's syndrome and her regular pediatrician had previously discussed with her the possibility of a developmental delay. PEG line was installed to supplement nutrition.

On 8/13/99 S—K was transferred from Pediatric ICU to the Pediatric floor. He remained hospitalized until 8/18/99. He underwent surgical alignment for the olecranon fracture. The cuts and abrasions were noted as healing and he made significant gains in physical and speech therapy. He became more alert, happy, smiling and vocalizing with words like "hi mom". He continued to be monitored for signs of increased intracranial pressure which continued to be negative. He was treated through this time period for sinus infection, ear infection and scabies. Again Dr. B's evaluation was noted that he "lagged" behind a normal 2 year old and he recommended further psychological evaluation for developmental delay versus head trauma / injury.

On 8/18/99 he was discharged from SJ Medical Center with the recommendations for continued rehabilitation. Prior to discharge, the elbow was x-rayed and Dr. O. felt alignment was good aHis diagnosis at the time of discharge.

Dr. P Pediatrician followed SK through 11/21/99 and noted he was making gains as an outpatient. The PEG tube was removed 9/1/99, at the request of his mother as S—K was eating well. Occupational therapy continued 2-3 times. Physical Therapy continued and it is noted his gait improved. Cast on his left arm was removed. Neuro checks were within normal limits however right eye remained sluggish as compare to the left.

Concurrently he was also followed with his local N. A. Health Center, A.B. Physician's Assistant who documents on 11/12/99 that is now walking alone with a wide based, staggering gait. His was using his left arm, however appeared to periodically have discomfort. He was gaining weight and mother reported he was eating well. He was still unable to combine words into sentences however A. B., PA felt he was showing improvement however also noted a sluggish right eye. He also felt that his cognitive abilities were behind that of a normal 2 ½ year old and concluded a Diagnosis of Developmental Delay questionable due to closed head injury versus VACTERL Syndrome with recommendation for close monitoring and further neurological evaluation.

Discussion of Past Medical History / Review of Literature

VACTERL (Vertebral anomalies-Anal atresia-Cardiac abnormalities-Tracheal-Esophageal fistula-Renal Agenesis and Limb defects) is a combination of multiple conditions often associated with:

Major Features	**Head and neck:** Macrocephaly or microcephaly. dolichocephaly, and retrognathia.
	Ears: Dysplasia and atretic canals.
	Eyes: Microphthalmia, short palpebral fissures, hypertelorism, and agenesis of cerebellum.
	Nose: Prominent philtrum.
	Mouth and oral structures: Cleft palate and thin upper lip.
	Neck: Short and broad neck.
	Hand and foot: Defects of the radius, humerus, preaxial ray, and third ray, rudimentary thumb,
	Spine: Vertebral dysgenesis, spondylocostal dysplasia, scoliosis, and hemivertebrae.
	Nervous system: Aqueductal stenosis with hydrocephalus, encephalocele, meningocele, and agenesis of corpus callosum.
	Cardiovascular system: Ventricular septal defect, atrial septal defect, transposition of the great vessels, anomalous pulmonary venous return, Eisenmenger complex (dextroversion of the aorta), hypertrophy of heart ventricles, and tetralogy of Fallot.
	Respiratory system: Tracheo-esophageal fistula, hypoplastic lung, abnormal lung lobulation, laryngeal stenosis, and perinatal asphyxia.
	Gastrointestinal system: Anal atresia, intestinal malrotation, tracheo-esophageal fistula, rectovaginal fistula, duodenal atresia, and esophageal atresia.
	Urogenital system: Urethral atresia, kidney dysgenesis, retrourethral fistula, rectovaginal fistula, hydronephrosis, and hypospadias.
	Hematopoietic system: Accessory spleen.
	Growth and development: Mental retardation.
	Heredity: The syndrome is transmitted as an autosomal recessive (David-O'Callaghan type) or an X-linked recessive (Hunter-MacMurray type) trait.

The association of vertebral anomalies, in particular the lumbo-sacral level, along with the heart, renal and radial defects usually constitutes the classical manifestation of VACTERL syndrome. It is also known that some affected with this syndrome will not manifest all the typical characteristics. Sometime the fetal stomach with be small or absent resulting in tracheo-esophageal fistula, sometime hemi-vertebrae or scoliosis of limb particularly radius anomalies, club hand, reduction defects or polydactylies *(more fingers or toes*). The presence of a supernumerary 13 rib (13-14 thoracic / 6-7 lumbar) is often a characteristic. Hydrocephalus is often associated.

Babies, who have been diagnosed with VACTERL association typically, will have three or more of the above abnormalities. As there is a wide range of manifestations, it is difficult for researchers to identify the exact incidence within the population. More commonly, these patients will have congenital heart conditions such as ventricular septal defect, atrial septal defect and tetralogy of Fallot. Less commonly, truncus arteriosus and transposition of the great arteries. Other defects seen with VACTERL include spinal column defects such as small vertebrae or hemi-vertebra (have of the bone forms). During early life these vertebral conditions are often asymptomatic however later life these spinal abnormalities may put the child at risk for scoliosis or curvature of the spine.

Overall the prognosis varies depending on the particular association of anomalies. In some cases of early pre-natal diagnosis, termination of the pregnancy may be offered and if elected to continue constant monitoring with ultrasound for fetal growth and development is recommended. The main goal is to identify all the possible associated defects and treat them accordingly. Unless there are several very severe defects these babies can do well and lead normal productive lives.

Readings and References.

1. Khoury MJ, Cordero JF, Greenberg F, James LM, Erickson JD **A population study of the VACTERL association: evidence for its etiologic heterogeneity**. Pediatrics 1983 May;71(5):815-20
2. Rittler M, Paz JE, Castilla EE VACTERL association, **Epidemiologic Definition and Delineation.** Am J Med Genet 1996 Jun 28;63(4):529-36
3. Jones KL. Vater association in **Smith's Recognizable Patterns of Human Malformation.** WB Saunders Company – Philadelphia - 1998, pp 664-665.

Discussion of Diagnosis / Review of Literature

Closed Head Injury (CHT): Head injury is classified as any trauma that leads to injury of the scalp, skull or brain. It can be caused by penetrating trauma, blunt force, rotational acceleration, or acceleration-deceleration injury. CHT may result in depressed or non-depressed skull fracture, epidural hematoma, subdural hematoma, cerebral contusion, brain edema, increased intracranial pressure (ICP), brain herniation, concussion (mild to moderated diffuse brain injury), and/or coma (diffuse axonal injury [DAI]).

Head injuries occur quite frequently. Most of these injuries are minor because the skull provides the brain with considerable protection and most often the symptoms resolve with minimal treatment however as accidents resulting in head injury often leading to death or disability therefore require further management resulting in hospitalization. Sometime head injury results in non-reversible brain damage that can occur from bleeding inside the brain and/or forces that damage the brain directly. The most common signs/symptoms of serious brain injury;

- Changes in personality, emotions, or mental abilities
- Speech and language problems
- Loss of sensation, hearing, vision, taste, or smell
- Seizures
- Paralysis
- Coma, confusion, drowsiness
- Convulsions
- Fracture, laceration abraision to the face and/or head
- Restlessness, clumsiness or lack of coordination
- Severe headache
- Fluid draining from mouth, nose or ears (clear or bloody)
- Decrease in respiratory rate
- Irritability, personality changes or unusual behavior, especially in children
- Pupil changes
- Stiff neck, vomining or the inability to see, taste, smell or speak.
- Inability to move the limbs

These signs/symptoms can occur immediately or may result over a period of a few hours or even days. Even if the skull is not fracture, concussion, which is bruised brain from jolting trauma, can occur inside the skull.

Intracranial pressure can be the result of subdural hematoma can occur from head trauma. This is a bleeding between the brain tissue and the dura matter caused by the stretching or tearing of the brdiging

veins in the brain. A subdural hematoma may be acute, developing suddenly after the injury, or chronic, slowly accumulating after injury.

Epidural hematoma: Bleeding between the dura mater and the skull bone is an epidural hematoma. These occur when arteries are cut. Injury in the temple area is a common cause. Epidural hematoma is potentially serious and often requires surgery.

Intraparenchymal hemorrhage/cerebral contusion: These terms describe bleeding into the brain tissue itself. A contusion is like a bruise to the brain tissue and usually requires no special intervention, much like a concussion.

Concussion describes an injury to the brain following trauma. Doctors use the term concussion to describe an injury to the brain that results from an impact to the head. By definition, a concussion is usually not considered a life-threatening injury, but it can cause both short-term and long-term problems. Concussions do not include injuries where there is bleeding under the skull or into the brain.

- A mild concussion may involve no loss of consciousness (being "dazed") or a very brief loss of consciousness (being "knocked out").

- A severe concussion may involve prolonged loss of consciousness with a delayed return to normal.

Medical Records Reviewed

AB Medical Center

Pediatric Orthopedics

U. C. Medical Center

Children's Hospital

AM Health Center

Renal Consultants

Missing Records

C. M Ophthalmology

U. C. Medical Center, Ultrasound Report

Pediatric Rehabilitation Medicine

As discussed; Suggestions for additional Medical Experts

1. Pediatrician specializing in congenital anomalies particularly VACTERL
2. Possibly a Genetic Specialist
3. Possibly a Neurologist

Potential Witnesses / Treating Providers

1. A. B Physician Assistant Native American Health Center
2. G. D., MD Neonatologist at A.B. Medical Center
3. F.P., Neonatologist at U.C. Medical Center
4. Dr. B. Neurologist
5. Dr. S.L. Emergency Room Physician
6. K. L. Social Worker at S.J. Medical Center
7. Random Nursing Staff Pediatric ICU / floor nurses

Conclusion / Recommendations

1. VACTERL is a very unusual, combination of syndromes and the long-term prognosis is dependent on the combination of anomalies. S. K. had multiple systems involvement. This may allow a window of opportunity for the defense to maintain S. K. 's pre-existing condition was responsible for his outcome and long-term disability. As the prognosis for children with this disorder can vary tremendously it will be important to discuss with the treating providers the extent of S. K's VACTERL condition and which abnormalities were associated, which is unclear from the medical records provided. As previously discussed, I have listed the types of medical experts we might want to locate, shoul

2. The medical records support evidence that S. K. sustained very severe head injury requiring extensive treatment and rehabilitation however he also had a documented past medical history of developmental delay. As developmental delays can be associated with VACTERL as well as with head trauma, it will be important to discuss with these treating providers the extent of the learning disabilities prior the accident they feel are directly associated with the syndrome and which learning disabilities can be directly related to the MVA. This may be difficult as the documents provided are suggestive of quandary in regards to the head injury resulting in cognitive defect versus the pre-existing developmental delay.

3. Mother's description of SK prior the accident is inconsistent with the deficits documented in the pediatric health records therefore it will be important to discuss the pre-accident status with mother as well as the Dr. Pediatrician.

4. SK remained on a ventilator and in a semi-comatose state. Upon regaining of a conscious state he exhibited periods of disorientation and behavioral problems, which was not noted in the pre-accident history. It is not uncommon, especially for children to become disoriented following this type of events however children with certain developmental disorders also often display impairment in social interaction may raise question. As the medical records support evidence that SK did not exhibit deficits in social skills prior the accident it will be important to discuss with Dr. B, Neurologist, these events in order to determine the association with the head-trauma, the ventilatory support or any contributory factors that could be associated with his pre-existing condition.

5. It will be important to request and obtain the NA Health Centers, pediatric records for SK as well Speech and Developmental exams order by AB, Physician Assistant in March of 1998 in order to review the results of the testing which may further explain the status of this 2 year old prior the accident.

6. It will be important to discuss with AB, Physician Assistant at NA Health Center, S. K's status prior to the accident. Post –accident Mother reports that he had been walking, talking etc which certainly is inconsistent with the one report provided by S.J. Medical Center, Occupation / Physical Therapy in June of 1998 which revealed SK to be guarded, antalgic and unable to speak clearly.

7. It will also be important to discuss with Mother if SK was restrained in the automobile. Accident reports state he was belted in an infant seat which is inconsistent with Ms. K.L. Social Worker who documented that he was un-restrained in the back seat.

Product Liability

Fact Chronology: Sequence of Events

Fact Chronology

	Date & Time	Source(s)	Fact Text
	Sun 08/24/1997 9:00 a.m. CT	A B Medical Center Bates 156 **Transfer Summary** G.D., MD	S. was born pre-term (one month early to an insulin dependent Diabetic mother. Anomalies at birth were 1. Imperforated anus with an anteriorly placed perineal fistula and left undescended testicle. Pediatric surgeon Dr. Ped Surgeon, M.D., distended the fistula surgically at this time. S. was transferred to U.C.S.F. at this time for further evaluation and treatment of possible Vater association and a complete surgical repair of the fistula. 2. Other diagnosis at birth were transient hypoglycemia and mild hypovolemia
	Sun 08/24/1997 11:45 a.m. CT	U.C.. Medical Center Page 194 **Consultation Report** F.P., MD	Transferred for Surgical repair of Imperforated Anus. Noted at A B Medical Center KUB xray (Kidney, Ureter, Bladder,) which showed air in rectum and a Hemivertebra at level T 9 U.C.. Medical Center Admitting Diagnosis: 1. Term Male Infant 2. Prominent Heart Murmur 3. Low Imperforated Anus 4. Undescended Testis (Left) 5. Left Hemivertebra at T9 6. Probable Vater Association
	Sun 08/24/1997 12:35 p.m. CT	Page 60 S.L., NNP U.C.. Medical Center	Admitted to Intensive Care Nursery, Diagnosis: 1. Imperforated anus with rectal fistula, 2. Fracture Left Clavicle, 3. Vertebral Anomalies at T9, 4. 4th Toe right foot crooked.
	Mon 08/25/1997	Pages 175-176 K. B., MD U.C.. Medical Center U.C. Medical Center, Abdominal Ultrasound Report	Right Hydronephrosis and Normal Left Kidney
	Mon 08/25/1997	Page 164 U.C. Medical Center, Physician Progress Notes S.H., MD	Cardiac Evaluation completed EKG reveals: Large Patent ductus arteriosus with left to right shunt Indomethocin started

Fact Chronology

	Date & Time	Source(s)	Fact Text
	**	Attending U.C.. Medical Center	**
	Mon 08/25/1997	Page 175 U. C. Medical Center, Radiology Reports Chest and Abdomen N. C., MD	Chest x-ray reveals: increased pulmonary vascularity, mild Cardiomegaly, fractured left clavicle, Butterfly vertebra of T9, and partial fusion of the posterior right T9 and T10. Normal abdomen.
	Mon 08/25/1997	Page 85 U.C. Medical Center, Physician Progress Notes N. S., MD	36 week gestational age Vater Syndrome Diastolic run off murmur Recommendations: continue Indomethocin
	Mon 08/25/1997	Page 60 U.C. Medical Center, Physician Progress Notes T. D., MD	Assessed and evaluated for surgical repair Imperforated Anus. Surgery delayed for Cardiac Murmur work up.
	Mon 09/22/1997	Page 1-2 A B Medical Center A.B., PA	American Native Health Center well baby exam reveals PDA closed with Indomethocin Cleft Mitral Valve Electrolyte Imbalance Fracture Left Clavicle (healing with good range of motion) Hydronephrosis - resolving Developmental of gross motor, fine motor and language within normal limits.
	Mon 03/23/1998	Page 97 A B Medical Center A.B., PA	Several Routine Exams reveal: Developmental Delay. Scheduled for Speech and Physical Developmental Evaluations 8/24//99 - 3/31/99
	Fri 08/06/1999	Pages 130-140 S. J Medical Center, Physician Progress Notes	S. K., a 2 year old male passenger ejected from a high speed roll over van and found 10 feet from the vehicle unconscious. He was immobilized and intubated at the scene and then take by Cal-star to S. H Medical Center. S.G., MD evaluated him continuously upon admission. Evaluation reveals a Diagnosis of: 1. Closed Head Injury 2. Intracranial Hemorrhage with small Epidural Hematoma 3. Scalp Laceration 4. Multiple Abrasions.

Fact Chronology

	Date & Time	Source(s)	Fact Text
	**	**	Positive History of Developmental Delay was documented.
	Sat 08/07/1999	Page 133 S.J. Med. Center	K. L. Social Worker saw S and Documented: "apparently patient was unrestrained and ejected from the van he was riding in after it rolled (lost control after blowing a tire)".
	Sun 08/08/1999	Page 135 S. J Medical Center, Physician Progress Notes B. Neurologist, M.D. Page 136 S.J. Medical Center, Radiology Report	neurosurgery consultant, saw S and felt overall neurologically he was stable even though his ICP (increased intracranial pressure) was liable CT scan report reveals: impression was persistent left parietal contusion with a small midline shift and no changes from previous scan.

Product Liability
Glossary of Terms

Glossary of Terminology [Sample]

	Full Name	Description
	Anomaly	A marked abnormality, as of an organ or part, especially a congenital or inherited defect.
	Aphasia	Loss or impairment of the power to use or comprehend words, usually resulting from brain damage.
	Aphonia	Loss of voice and whispered speech.
	Ataxia	The partial or total loss of coordinated movement caused of disease of the nervous system
	Butterfly	Pertaining to anything shaped like a butterfly.
	Cardiomegaly	Enlargement of the heart.
	Cephalohematoma	A mass of clotted blood, located between the periosteum and the skull of a newborn. It is confined between suture lines and usually unilateral. The cause is rupture of periosteal bridging veins due to pressure and friction during labor and delivery. The blood reabsorbs gradually within a few weeks of birth.
	Cleft	Usually an abnormal fissure or opening especially when resulting from failure of parts to fuse during embryonic development. (Mitral valve is the cardiac valve between the left atrium and left ventricle, also called bicuspid).
	Congenital	Existing at or dating from birth. Acquired during development in the uterus and not through heredity.
	Heart Murmur	Murmurs are blowing, whooshing, or rasping sounds produced by turbulent blood flow in or near the heart. Often, they are caused by turbulent blood flow through the heart valves. A murmur does not necessarily indicate a disease or disorder, and all heart disorders do not cause murmurs. Murmurs are classified ("graded") depending on their ability to be heard by the examiner. Murmurs in children are more likely to be caused by: patent ductus arteriosus (PDA) atrial septal defect (ASD) ventricular septal defect (VSD) coarction of the aorta anomalous pulmonary venous return
	Hemivertebra	A congenital defect of the spine in which one side of the vertebra fails to develop completely
	Hydronephrosis	The distention of the pelvis and calyces of one or both kidneys
	Imperforated	Condition of being atretic, occluded or closed.
	Undescended Testis	a testis that has failed to descent into the scrotum, there are palpable and non-palpable variants.

Glossary of Terminology [Sample]

	Full Name	Description
	Vater	V.A.T.E.R./ V.A.C.T.E.R.L. are the acronyms used to describe the types of physical problem(s) a child may have. It's an association characterized by the sporadic association of specific birth defects or abnormalities. Not all children born with this association have the exact same level of abnormality. Some may be mild, while others will be severe. The survival rate is very much dependent on how severe the defects are. V - Vertebrae problems, For example, abnormally formed vertebrae, and extra ribs. A - Anal Anomalies and sometimes rectum problems. For example, there is no opening where the anus should be C - Cardiac problems. For example, there may be a hole in the heart or a defective valve T - Trachea problems. For example, there is a connection between the trachea and esophagus. E - Esophagus problems. For example, part of the esophagus is missing. R - Radius (lower arm bone) and/or Renal (kidney) problems for example, the larger lower arm bone is abnormally formed, or a thumb is missing or abnormally formed kidney. L - Limb (arms, hands, legs or feet) problem(s). For example, some are born with extra fingers or shortened limbs According to: (Behrman: Nelson Textbook of Pediatrics, 16th ed., Copyright © 2000 W. B. Saunders Company) Vater association, which includes vertebral defects, anal atresia, tracheoesophageal fistula with atresia, radial upper limb hypoplasia, and renal defects. Single umbilical artery and cardiac and genital anomalies are also seen in this association. These defects are likely to occur together in almost any combination of two or more and usually represent a sporadic occurrence in an otherwise normal family.

Product Liability

Treating Providers

Treating Providers

	Full Name	Title	Works For
	J-- C--, P.T.	Physical Therapist	S.J. Medical Center
	Dr. P	Pediatric Rehabilitation Physician	Native American Health Center
	K. L.	Social Worker	S.J. Medical Center
	G.D., MD	Neonatologist	A B Medical Center
	Nurse Baily, RN	Registered Nurse	S.J. Med. Center
	Dr. Kr	Radiologist	S.J. Med. Center
	N. C., MD	Radiologist	U. C. Medical Center
	Dr. Ped Surgeon, M.D.	Pediatric Surgeon	A B Medical Center
	Tr Ca	Physical Therapist	S.J. Med. Center
	K. B., MD	Radiologist	U.C.. Medical Center
	F.P., MD	Neonatolgist	U.C.. Medical Center
	S-- T--., M.D.	Pediatric Neurologist	U.C. Medical Center
	B. Neurologist, M.D.	Neurologist	Neurology Assoc., S.J. Med. Center
	Dr. M	Pediatric Intensive Care Physician	S.J. Med. Center
	R. Radiologist, M.D.	Radiologist	S.J. Medical Center, Radiology Dept.
	Dr. S.La	Trauma Physician	S.J. Med. Center
	S.L., NNP	Neonatal Nurse Practioner	U.C.. Medical Center
	S.G., MD	Emergency Room Physician, S.J. Medical Center	U. C. Medical Center
	N. S., MD	Pediatric Cardiologist	Cardiology Associate, New Town, USA
	Dr. B	Neurosurgeon	S.J. Med. Center
	S.H., MD	Neonatologist (attending)	UCM
	Dr. G--Z	Orthopedist	S.J. Med. Center
	M--J--, P.A.	Physicians Assistant	Native American Health Center
	T. D., MD	Pediatric Surgery Resident	U.C.. Medical Center, Resident Surgery Program
	A.B., PA	Physician's Assistant	Native American Health Center

MVA - Roll Over

References

References

	Name
	Behrman: Nelson Textbook of Pediatrics, 16th ed., Copyright © 2000 W. B. Saunders Company
	Canale: Campbell's Operative Orthopaedics, 9th ed., Copyright © 1998 Mosby, Inc.
	Grainger & Allison's Diagnostic Radiology: A Textbook of Medical Imaging, 4th Ed.,
	JAMA Arch Surg. 2003;138:142-145
	Marx: Rosen's Emergency Medicine: Concepts and Clinical Practice, 5th ed., Copyright © 2002 Mosby, Inc.
	Mosby's Manual of Diagnostic and Laboratory Tests, Pagana & Pagana, 1998
	Mosby's Nursing Drug Reference, 2001
	Stedmans Medical Dictionary 2002
	Surgical Clinics of North America
	Taber's Encyclopedia, 2001
	Townsend: Sabiston Textbook of Surgery, 16th ed., Copyright © 2001 W. B. Saunders