#### Surgical Management of Gastro-Esophageal Reflux Disease

Prof. J. Boix-Ochoa

#### **WOFAPS** General Secretary

The author, Professor on Pediatric Surgery, expose his experience on 5140 children, some of them with more than 30-year follow-up, less than 3 years of age with GERD. -3711 under one year and 1429 over 13 months with a surgical treatment of 16, 4% of them The highest % of patients with the lowest surgical treatment where patients self-referred (7% surgery) o referred by pediatricians (17.3% operated) and the highest rate of surgically treated patients were logically referred by pediatric gastroenterologists (92%) Therefore, the problem is very simple medical treatment has to be always the first attempt and when it fails, and then surgery is mandatory.

The discussion can only be centered: Which kind of treatment? And when we can say it has failed?

Where is the border between medical treatment and surgery? The author expose his 40 years of research in the physiology of the antireflux barrier, its anatomical, physiological and neuroendocrinological pathways for its maturation and control of the complicated jigsaw puzzle of the factors building an effective antireflux barrier. Once explained the cornerstones of the physiology, he will analyze the pathology interfering, destroying or inhibiting the antireflux barrier. Without the knowledge of the whole pathophysiology, any treatment can fail.

Symptoms will be exposed.

Diagnosis: Radiological imaging, manometry, impedance, 24 hours Ph metry-the author published in 1980, the normal parameters valid until today, radionuclear diagnosis, biopsies, esophagoscopy and swallowing studies will be presented and analyzed.

The discussion will be centered: Which kind of medical treatment, how long and when the patient begins to be a surgical patient.

The author hopes the lecture will bring you the State of the Art of the actual GERD. And you will form your own opinion because in Medicine nothing is absolute. The knowledge of today is not the truth of tomorrow, and in Medicine nothing is more permanent as change.

When Surgery?

That is the question and you will decide based in your GERDs disease knowledge, the kind of surgical technique to be used.

#### Onto+Philogeny of the lung malformations

Prof. J. Boix-Ochoa

WOFAPS General. Secretary

The author with an experience over 400 lung malformations, the study of the lung organogenesis in more than 4000 fetuses all kinds of ages and the literature of the ontogenesis of ancient fishes and reptiles, believes that all of life is the product of evolution and that the evolutionary process is driven largely by natural selection.

The author presents the evolution of the lung from the first fishes that appear in the Devonic era, 400 million years ago until the ontogeny of the normal lung in all its phases and the teratogenic factors and determinants-timing of the insult, severity, duration, velocity of growth of the tissue and grade of interaction between the different pulmonary structures.

The comprehension of the lung malformations can only be based in the study of the Embryology, ontogeny and phylogeny of the lungs, just as Archeology is the basis of History. All the lung malformations are related between them and their study enhance and improve their surgical approach, diagnosis and medical treatment according to their severity.

#### **Management of Blunt Trauma to the Spleen**

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Spleen is the most frequent solid organ to be injured in blunt abdominal trauma. Considering its important role in providing immunity and preventing infection by a variety of mechanisms, every attempt should be made, if possible, to salvage the traumatized spleen at any age particularly in children. After primary resuscitation and steps to diminish the cascade of proinflammatory activation or cytokinemia, mandatory requirements for non-operative management (NOM) include absence of hemodynamic instability, lack of associated major organ injury, and admission in the intensive care unit for high-grade splenic injury (SI) and in the ward for milder types with close monitoring.

Determinant role of abdominal sonography or CT scan and in selected cases, peritoneal lavage or aspiration, for appropriate decision cannot be overemphasized. However, the high status of clinical judgment *would not be replaced* by any paraclinical investigations. About two third of the patients would respond to NOM. In most patients requiring operation, failure of NOM usually occurs within 12 hours of treatment. Hypotension at arrival, moderate (6-9 mmol/L) to severe base deficit (≥ 10 mmol/L), contrast blush (jet of dye extravasation) or AV fistula in CT scan are associated with high failure rate of NOM. Partial arterial splenic embolization may be helpful in selected cases. Delayed rupture of the spleen [48 h or more (up to one month) after injury; mostly during 2 weeks post-injury] occurs in 10-15% of cases. In this situation, NOM is not effective. Thus, operation is mandatory.

Duration of hospital stay or close monitoring (or strict bed rest) in a hemodynamically stable patient (*in days*) is equal to grade of SI plus one (e.g. grade III = 4 days absolute bed rest). When NOM is successful, estimation of duration of activity restriction (*in weeks*) is almost equal to the grade of SI plus 2 (e.g. grade III = 5 weeks restriction of normal activity).

In stable patients with equivocal abdominal signs, several authors have used laparoscopy. The latter can be diagnostic and also therapeutic. When operation is unavoidable, spleen saving procedures (splenorrhaphy or partial splenectomy) should be tried. In case of total splenectomy (TS), auto-transplantation (50% of the spleen, even in the presence of clean contamination), preferably in the omental patch, may lead to return of immunity, at least partially, to prevent or reduce the chance of subsequent infection. Although TS with autograft is immunologically superior to TS-only procedure, these patients should also be protected by vaccination and daily antibiotic for certain period of time. The essential steps for prevention of overwhelming infection after TS are not only immunization (preferably 2 weeks after TS) and administration of daily antibiotic (up to 5 years of age or one year in older children), but include education and information about this dangerous complication.

## مطالعه ۵ ساله ترومای کودکان در کاشان

دکتر مهرداد حسین پور، دکتر مهدی محمد زاده

#### The five- year study on pediatrics trauma in Kashan

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**Introduction:** Trauma is one the major causes of Emergency department admission. They are also the main causes of children mortality under the age of 12 years old. The aim of the study was obtaining some information about the epidemiology of children trauma.

**Method and Materials:** 5000 children admitted to emergency department were enrolled in this cross- sectioned study from 2005 to 2009. The way of sampling was census. All the data were gathered from checklist from medical files of the patients.

**Results:** Incidence of trauma in males was 66.5% and in females 33.5%. 51.2% of traumas occurred at homes. Two-year-old children had the highest rate of injuries (11.7%). The most frequent traumas were falling (62%) and vehicle accident with 35 % took the second place. 38.8 % Children had head injury and 55.3% limb injury. Mortality rate in the study group was 0.8% (=42)

**Conclusion:** It seems that using of safety materials in preventing trauma injuries is the most effective method for decreasing traumas in children.

### مطالعه ۵ ساله درمان غیر جراحی صدمه غیر نافذ کبد در مرکز طبی کودکان

دكتر جواد احمدي

## Five years study of non operative management of Blunt hepatic trauma in children

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**Back ground**: In recent years some studies have been published concerning non operative management of low grade liver Blunt trauma with success rate near to 95%. Non operative management of liver blunt injury is done for hemodynamically stable patients with no other injuries that need to operation.

In this study, we evaluate 12 patients in pediatric age group with hepatic blunt trauma which we managed them by non- operative management.

**Methods:** Over 5 year's period, children with blunt hepatic trauma were evaluated retrospectively. We are a tertiary referral center; therefore we had not any unstable patient who needs laparotomy.

**Results:** In this 5 years we had 12 cases their ages was 1/5 y to 12 years. 8 cases were male & 4 cases were female. At first they were undergone pelvic and abdomen CT-Scan study with IV and oral contrast for evaluating of other organs injury and grading of hepatic trauma. If the child was hemodynamicaly stable and with no other intra peritoneal organs injury, non operative management was done for hepatic trauma regardless of degree of injury, and then the child was admitted in pediatric I.C.U. all of our cases had been gone to our hospital at least 12 hours after trauma. Their vital sign was evaluated every 1 hour. Hb was detected every 6 hours for first 4 days and then every day. Sonographic study was done every 72h. After 1 week the child was transferred to surgery ward and after another week if the child was stable, he or she discharged from hospital. We had not any mortality due to this management. One of our patients's suffered from hematobilia in the day of discharge of hospital. Therefore were referred him for ambolization to another center. One of our patients under went sonography guided abscess drainage due to abscess formation nearly 1 mount after trauma all tow complicated case had high grade hepatic injury.

**Conclusion:** With non operative management of blunt hepatic trauma we can manage the patients without need to General Anesthesia and Laparotomy or Laparoscopy and their probable complications. The mortality and morbidity rate is low and we can do it for children too.

ارزیابی تغییرات فشار خون، فشار ورید مرکزی و فشار داخل چشم هنگام افزایش فشار داخل شکمی در بیماران ترومایی بستری در بخش مر اقبت های ویژه دکتر علی فروتن، دکتر حمیدرضا عباسی، دکتر شهرام پایدار، دکترعلی پاکیاری، دکتر مسروری

#### Evaluation of Changes in Blood Pressure, Central Vein Pressure and Intra-ocular Pressure during Increased Intra-abdominal Pressure in ICU Admitted Trauma Patients

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**Background**: Intra-abdominal hypertension (IAH) and abdominal compartment syndrome (ACS), are common phenomenon in trauma patients in surgical ICUs, and have very high mortality rate. Due to importance of early detection of IAH, in many centers the intra-abdominal pressure (IAP) is measured as a routine measurement. Our goal in this study was to determine the incidence of IAH and ACS in trauma patient in our surgical ICUs; also we studied hemodynamic changes in patient with IAH and ACS. Because some studies suggested rise in intra-ocular pressure (IOP), in patients with excessive fluid therapy we also measured IOP in the patients.

**Materials and methods**: IAP was measured in all trauma patients who were admitted in surgical ICU and did not have pelvic fractures, twice daily for 3 days. The IAP was measured indirectly through urinary foley catheter. IOP was measured daily with Schootz tonometry.

**Results**: The incidence of IAH & ACS in our surgical ICU was 21% and 7% respectively. IAH was associated with decrease in blood pressure, and other changes in hemodynamic. None of the patients developed orbital compartment syndrome.

**Conclusion**: IAH and ACS is a common and lethal phenomenon in ICU admitted trauma patients. Hypotension in spite of fluid therapy and increase in central vein pressure are suggestive of elevated IAP. Due to low incidence of ocular compartment syndrome screening of IOP in trauma patient is not recommended.

#### ارزیابی تروما در کودکان در بیمارستان حضرت رسول اکرم بین سالهای ۱۳۸۶ تا ۱۳۸۹

دکتر مریم قوامی عادل،دکتر سید جواد نصیری، دکتر فریبا جهانگیری، دکتر صلاح الدین دلشاد، دکتر پیروز فرهود، دکتر خدیجه یزدانی، دکتر مهتاب وثیق

#### Evaluation of trauma in pediatric age group in a general hospital: 2007-2010

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**Background:** Injury represents a major concern for children and adolescents worldwide. Accidental traumatic injury may cause severe morbidity and mortality in the pediatric population. Injury prevention programs should be based on objective injury data. We perform this primary study to have a general view for pediatric trauma so it may clear up our next steps for trauma prevention and management in pediatric age group.

**Method:** It is a retrospective descriptive study on patients 0-14 years who were admitted in a general hospital between "2007-2010". Besides demographic data other variables such as trauma mechanism and type, paraclinical investigations and hospital stay analyzed by SPSS software.

**Results:** There were 622 patients with 226(36.3%) female and 396 (63.7%) male. Mean age of patients was  $7.46 \pm 3.64$  (0-14) years. Direct trauma was the leading mechanism of trauma (226 cases -36.3%). The other mechanisms were falling down (20.4%), pedestrian to car accident (18.8%), motor vehicle (21.1%) and stab wound (3.2%). Orthopedic and head injuries were the most common type of injury. (43.7% and 33.4% accordingly) FAST has been done in 374 patients that had positive findings in just 23 .From 275 brain CT scans 223 showed intracranial hemorrhage. 367 patients (59%) need some surgical interventions and there were 23 (3.7%) death among the patients. Mean hospital stay was  $5.31 \pm 6.49$  (0-79) days.

Conclusion: Male is more prone for trauma and directs injury is the most common type of injury. Fractures are very common but we must remember head injury, too. Prevention strategies should increase the risk awareness and encourage children and their parents to use necessary precautions. It seems pediatric trained neurosurgeons and orthopedics must be attended in trauma centers as many of trauma patients are children with fractures and neurosurgical injuries.

# عوامل موثر بر پیش آگهی تروما در گروه سنی کمتر از ۱۷ سال در بیمارستان امام حسین دکتر حجت درخشانفر، دکتر کریمیان، دکتر حاتم آبادی، دکتر امینی

# Prognosis of traumatized children younger than 17 years of age and contributing factors in Imam-Hussein Hospital

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**Objectives:** In this article, our goal was evaluating the prognosis of traumatized children younger than 17 years of age and contributing factors in Imam-Hussein Hospital.

**Methods and Materials:** In this descriptive cross-sectional study, we evaluated 151 traumatized children younger than 17 years of age attending to Imam-Hussein Hospital in 2009 and 2010.

**Results:** In this study, the mean PTS score was 11.04 that were related to the morbidity in the children. The mean PTS was 7.58 in traumatized children with morbidity and 11.34 in non-morbid cases with a statistically significant difference (P=0.001).

**Conclusions:** According to the obtained results, it may be concluded that PTS scoring system in traumatic children may be a good prognostic indicator in them.

### تنوع صدمات در کودکان: مطالعه مقطعی در بیمارستان شهید رجایی قزوین دکتر صادق صادقی پور رودسری، دکتر سونیا اویسی، زهرا نامجو

## Patterns of Injury in Children A Cross- Sectional Study in Shahid Rajae Hospital; Qazvin, Iran 2009

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**Introduction**: Unfortunately, injuries are very common with children. Nearly 1 in 4 children in the United States are injured each year, costing the American society \$347 billion per year. Most injuries are preventable, and preventable injury is the major cause of death and morbidity among children more than 1 year old.

**Aims**: The aim of this study was to describe the frequency of injury affecting 1700 children between 0 and 14 years old in Qazvin, Iran.

**Method**: A cross- sectional study was carried out based on hospital discharge data, report of 1700 children who referred to Shahid Rajae Hospital; trauma center in Qazvin province. Modes of injury were grouped into 2 categories included motor vehicle accidents and none motor vehicle accidents. Genderspecific Odds Ratio for each category was calculated and the effect of gender on the type of injury was determined.

**Results**: 72% of injuries were none motor vehicle accidents such as falls, Animal bites, back fall and Involvement in conflict. 68.6% of children injured were boys OR=1.4, CI 95 %( 1.12-1.75). Incidence of back fall in none motor vehicle accidents was 55 % and 73 % of children were boys OR=1.31, CI 95 %( 1.03-1.68). Also 71 % of children with fracture were girls OR=7.45, CI 95 %( 4.85-11.44). There was not a significant difference between boys and girls in the others injuries.

Conclusion: Since most children's injuries are due to none motor accidents and incidence of Back fall is more than other injuries especially in boys, we can teach families to protect their children from Back fall and if they have a son, they were more careful to keep him. Also All types of fractures are more common in girls so when a girl will go to the emergency room of hospital, doctors must carefully examine her to rule out fractures. Injury is a key cause of days away from school, or from the normal developmental tasks of childhood, and can lead to permanent disability. Therefore decrease of them will promote quality of life in society.

# گزارش ۲۰۰ مورد آسپیراسیون جسم خارجی در مجاری تنفسی دکتر حیدر علی داوری

#### Foreign body aspiration (report of 200 cases)

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This survey is a study on 200 patients referred to Al Zahra and kashani hospitals for suspicious foreign body aspiration during 10 years. Fifty eight percent of patients were males. Most of admissions were in summer and autumn. Ninety percent of patients were under 5 years old and 62.5% of them were under 2 years old. The most common presenting symptoms were sudden cough (78%), history of aspiration (74.5%) and cyanosis (63%). The most clinical findings were hoarseness (51%) and wheezing (35%). In most cases, CXR was normal but air trapping was the most common (15.5%) abnormal radiological finding.

Watermelon nut was the most common aspirated body (31%). The most common location of foreign body trapping was in right bronchus (47%). In most cases the time of arrival to hospital was less than 24 hours (27.5%) and bronchoscopy was done in the admission day in 59 % of cases.

In all patients rigid bronchoscopy was performed. Ninety-nine percent of patients had general anesthesia. Anesthesia time was 20-30 minutes in 80% of cases.166 patients had positive bronchoscopy .Among these patients, obvious foreign body was seen in 141 patients and in others, abnormal secretions were noted. The most common complication of procedure was laryngeal edema (22%).

In this study, we discuss the proper early diagnosis and treatment of patients with suspicious foreign body aspiration.

#### Injury Prevention For Fetus, Newborn, Infants, Toddlers & Preschoolers

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Insignificant trauma to the mother may not be insignificant to the fetus, Dr. William G. Barsan said at a conference on obstetrics, gynecology.

Trauma is the most common cause of nonobstetric death among pregnant women in the United States. Motor vehicle crashes, domestic violence, and falls are the most common causes of blunt trauma during pregnancy. All pregnant patients with traumatic injury should be assessed formally in a medical setting because placental abruption can have dire fetal consequences and can present with few or no symptoms

Placental abruption is the cause of fetal death in 50%-70% of losses after maternal trauma. "This is the one that may occur with relatively minor trauma" and can be hard to detect.

Prenatal care must include three-point seat belt instruction. The lap belt should be placed under the gravid abdomen, snugly over the thighs, with the shoulder harness off to the side of the uterus, between the breasts and over the midline of the clavicle. Seat belts placed directly over the uterus can cause fetal injury. Airbags should not be disabled during pregnancy.

Because many women are unaware of the potential for placental abruption without evidence of maternal injury, pregnant patients should be instructed to seek care immediately after any blunt trauma Domestic violence occurs in up to 25 percent of pregnant women, but physicians detect only 4 to 10 percent of cases. It is important for physicians to screen all patients for domestic violence and to be familiar. With the community resources for helping patients who experience domestic abuse. Screening of younger patients is particularly important, because they have higher rates of motor vehicle crashes and domestic violence. Resource materials in waiting rooms and restrooms ,allow patients to gather information without confrontation.

Children are at risk for injury from the moment they are born. Therefore, injury prevention strategies must be implemented even before newborns come home from the hospital. As children grow, they become more mobile. With this mobility comes a greater risk for injury. The more ground children can cover, the more potential dangers they will come into contact with. It is especially important, therefore, for the parents of children who can crawl, toddle, walk, and run to pay close attention to injury prevention.

### **Injury Prevention Strategies**

#### **Falls**

- \*Never leave infants or toddlers on a raised surface, such as a changing table or a counter top, unattended. Even if parents turn their backs for only a second, that is enough time for children to roll over and fall to the floor.
- \*Change children's diapers on a crib instead of a changing table. This way, if parents have to leave their children for a minute, they can protect their children from falling simply by pulling up the crib side.
- \*Always pull the crib side all the way up when children are in the crib. This way, children won't be able to climb out.

- \*Don't leave large stuffed animals in children's cribs or playpens. Children will quickly learn to use such toys to stand on to get out.
- \*When using infant seats, always strap children into them.
- \*Never leave infant seats on narrow raised surfaces such as a chair or a counter top. Sudden movements by infants can easily cause the seat (with baby in it) to fall.
- \*Don't allow children to stand on high chairs or regular chairs. They can easily fall.
- \*Lock all windows or screens, or install safety stops so they will only open a few inches.
- \*Don't allow children to sit on counter tops.
- \*Don't allow children to play on balconies unsupervised.
- \*Use safety gates at the top and bottom of all stairways in the home. Don't rely on doors. Eventually one will be left open.
- \*Provide rubber soled canvas shoes when children start walking. Stiff leather shoes are hard to walk in and may cause more frequent falls.
- \*Discourage running in the house, especially in rooms that have a lot of furniture.
- \*Cover all sharp furniture edges with corner guards and edge covers.
- \*Make sureall play areas are free of falling hazards such as deep holes, glass, and rusty and/or sharp objects.

**Suffocation or Choking** 

- \*Do not cover mattresses or pillows with plastic.
- \*Tie knots in plastic bags before throwing them away.
- \*Store all plastic bags (garbage bags, sandwich bags, grocery bags) out of reach.
- \*Use baby powder cautiously. It can be dangerous if large amounts are inhaled.
- \*After meals, remove bibs before taking children out of their high chairs.
- \*Never pin or tie pacifiers to children. The strings can easily wrap around children's necks.
- \*Fasten the restraining straps on children's high chairs close to the body.
- \*Make sure crib mattresses fit tightly in the crib. If the mattress is too small, children are at risk for getting their heads, legs, or arms stuck between the mattress and the side of the crib.
- \*Make sure all mobiles are hung beyond children's reach.
- \*Never prop bottles or pacifiers in children's mouths.
- \*Make sure all sheets and bedcovers are loose so children cannot get stuck underneath them.
- \*Be wary of certain finger foods, especially for children under five years of age. Foods that are most frequently a choking hazard are nuts and popcorn. Grapes, hot dogs, hard candy and carrots can also be dangerous. Make sure they are cut into very small pieces before children attempt to eat them.
- \*Use balloons with extreme caution. They are especially dangerous if swallowed.
- \*Never leave infants or toddlers unsupervised near water. This includes bath tubs, wading pools, and swimming pools. A good rule to follow with infants in the bathtub is to keep one hand on them at all times. Keep bathroom doors shut at all times, and make sure the lids to all toilets are down when not in use.
- \*Keep the doors to all household appliances shut at all times.
- \*If there is an unused refrigerator or freezer in or around the house, remove the door, or lock it shut.
- \*As soon as children are old enough to crawl, make sure the floor of the home and any area that is within children's reach is free of small objects that can fit into children's mouths. Since young children do a lot of exploring with their mouths, they are at risk of choking on small objects that can become lodged in their throats. Frequent vacuuming or sweeping will limit the risk. Also make sure that all toys are free of small parts that can be pulled off and swallowed. Check clothing frequently for loose buttons and fasteners.
- \*Take an infant/child CPR course. The knowledge gained will be invaluable if a life threatening situation, such as a choking or a loss of consciousness, should arise.

#### **Poisoning**

- \*Keep all toxic materials, including household cleaners, medications, and chemicals out of the reach of children in cabinets that are locked or that have childproof latches.
- \*Throw out all medication, household cleaners, and other toxic substances that have not been used in the last year. The fewer poisonous substances there are in your house, the less the risk for accidental poisoning.
- \*Lock up all medications. Unfortunately, children sometimes figure out how to open bottles that have childproof caps.
- \*Avoid carrying medications in purses or briefcases. Children love to go through them and may mistake the medication for candy.
- \*When giving medication to a child, avoid calling it candy or making a game of it.
- \*Make sure that all medications and chemicals in the home are correctly labeled. Parents will need to know exactly what their children have swallowed in the event of a poisoning.
- \*Try to store all nonedible substances in a place other than the kitchen.
- \*Never store chemicals or cleaners in food containers.
- \*Teach children to recognize and to avoid dangerous products.
- \*Rinse empty chemical containers before throwing them away. Make sure they are discarded in a place where they cannot be retrieved by children.
- \*Use insect and rodent poisons very carefully. Make sure they are placed only in areas where children cannot find them.
- \*Treat alcoholic beverages as poisons. Lock them up out of the reach of children.
- \*Make sure that all paint in the home is lead free. Paint manufactured before 1976 contains lead. If there is any sanding and stripping of old paint going on in the home, remove children from the premises. Exposure to even paint dust can cause lead poisoning.
- \*Many house plants are poisonous. Keep them out of the reach of children.
- \*Keep the telephone number of the local poison control center on or near the telephone.
- \*Make sure a bottle of syrup of ipecac is in the home at all times to induce vomiting. NEVER use it unless instructed to do so by a physician or poison control center.

#### **Scalds and Burns**

- \*Use fire resistant clothing for infants. Wash them according to the manufacturer's instructions.
- \*Always feel car seats before putting children into them. They can become very hot from the sun.
- \*Keep children away from all hot appliances, including stoves, light bulbs, toasters, portable heaters, grills, irons, and curling irons.
- \*Do not leave cups of hot liquid (coffee, tea, soup) within the reach of children. Never carry children while pouring or carrying a cup of hot liquid.
- \*Turn down the water heater in your home to 120 degrees to prevent burns in the bathtub or at the faucet. Always check the temperature of bath water before bathing children.
- \*When children begin to understand words, teach them the meaning of "hot."
- \*Use safety plugs or outlet caps on all unused electrical outlets in the home.
- \*Turn all pot handles away from the edge of the stove while cooking.
- \*Avoid using tablecloths. Toddlers often use them to pull themselves up, and if hot food is on the table, it can come down on top of them.
- \*Make sure the cords to all appliances used in the home do not dangle within the reach of children.
- \*Tape extension cords together to prevent children from pulling them apart.
- \*Make sure all matches and cigarette lighters are kept out of the reach of children.
- \*If there is a fireplace in the home, make sure it is well screened.

#### **Motor Vehicle Accidents**

- \*Always restrain children in automobile safety seats. Use safety seats until children no longer fit in one, and are big enough to use standard adult seat belts (usually about 60 pounds, or five years of age).
- \*The most dangerous place for children to be if there is an auto accident is in the arms of an adult. Always place children in child safety seats.
- \*Make sure infants (up to 20 pounds) are placed in safety seats facing rearward instead of forward. The safest place to place infant safety seats is in the middle of the back seat.
- \*Always use the required safety harnesses and/or safety shields that come with the child safety seat.
- \*Make sure the seat belts and/or harnesses used to secure children into the safety seats are tight enough.
- \*Make sure the seat belt used to anchor the safety seat to the auto seat is in the correct position.
- \*Never leave a stroller behind a parked car.
- \*Don't allow children to play in driveways.
- \*Begin teaching traffic safety as early as possible.
- \*Don't allow children to play outdoors unsupervised until they have repeatedly proven that they understand the rules of traffic safety.

### فعالیت های پرخطر کودکان و عقیده والدین در مورد رفتار پرخطر کودکان دکتر حمید سوری

## Children's risky activities and parents' ideas on children's risk-taking behavior

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To explore children's risky activities after school and parents' views on children's risk-taking behaviors by age, sex and deprivation, a cross-sectional study with self-completed questionnaires was carried out. 476 pupils aged seven and nine years and 471 parents were randomly selected. The commonest risky activities were climbing walls (25.0%), climbing trees (14.8%) and riding carelessly (14.1%). Older children compared to younger ones (31.9% vs. 20.2%, P=0.004) were more likely to cross a busy road alone. In contrast, younger children were more likely to have cycled two on a bike (P=0.006) than older children. Using an aggregate score boys and more economically deprived children were more likely to take risks than girls (47.4% vs. 33.6%, P=0.002), or less economically deprived children (46.4% vs. 34.8%, P=0.011). However there was no significant difference between younger and older children relating to overall risky activities. Most parents (87.5%) believed that their children take risks when they play outside after-school anyway. It is clear that the pattern of risk-taking behavior for younger children was different from that of older ones'. Boys were more likely to take risks than girls. Boys and more deprived children are at greater risk of being involved in accidental injury than girls and less deprived children and their higher level of risky activities probably partly cause these injury variation rates.

# مطالعه رفتارهای پر خطر منجر به صدمات غیر عمد در دانش آموزان دبیرستانی تهران در سال ۱۳۸۸

الهه عيني، محمد موحدي، عباس آقايي، دكتر حميد سوري

## Study of risky behaviours leading to unintentional injuries among high school students in Tehran in 2009

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**Background and objective:** Since unintentional injuries are very high among children and adolescents, a study was conducted to determine risky behaviours leading to unintentional injuries among Tehran high school students in 2009.

Materials and Methods: In a cross-sectional study on 727 high school students of governmental and nongovernmental was selected using multistage randomizing sampling in Tehran. Education district were divided to three regions (North, Centre, and South) by stratified sampling. Data was collected by cluster sampling in each region using standard questionnaire of management diseases centre of America which was validated in Iran. Subjects were healthy students aged 12-19 years. Ill students were excluded. Risky behaviours on fall, burn, poisoning and road traffic injuries were studied.

**Results:** Mean age of subjects was 16.8±1.2, range (12-19) years. Overall, 53.3 percent were boys. About half of males and more than one third of females faced to unintentional injuries. Significant differences were observed in driving without licence among boys. Non use seatbelt was more current in governmental schools and district 16. Motorcycle using was more current in the south of Tehran (P<0/001). About one- fifth of subjects drove without licence and doing activity which caused fall and obstinate drug using. More than two third of women, one third of men used of pedestrian bridge. About half of samples do not use helmet during motorcycle driving. Significant differences was observed among males related to poisoning substance expose, driving without licence, motorcycle driving, no helmet use during motorcycle driving (p<0/001).

**Conclusion:** Because unintentional injuries could be prevented and according to finding which showed that about half of males and more than one-third of females exposed to unintentional injuries during their life, health policy maker have to proposed appropriate health program.

#### Epidemiology of pediatric trauma in Isfahan Alzahra Hospital.1383-1386

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**Objective:** Accidents are one the major causes of Emergency room admission. They are also the main causes of children mortality under the age of 15 year old. The aim of the study was obtaining some information about the epidemiology of children trauma.

**Method and Materials:** 2300 children admitted at Alzahra hospital's emergency room were enrolled in this cross sectioned study from 1383 to 1386. The way of sampling was census. All the data such as were gathered from checklist from medical files of the patients.

**Results:** Incidence of trauma in males was 66.7% and 33.3% in females. 45% of accidents occurred in homes and schools. The most frequent accident was falling (32%) and vehicle accident with 31.1 % took the second place. In patients with multiple traumas 34.3 % had head injury and 18.9% had limb injury. Mortality rate in the study group was 4.1%.

**Conclusion:** It seems that the children surveillance and using of safety materials in trips are the most effective methods of decreasing trauma-induced mortality in children.

# جلوگیری اولیه از تقابل کودک والدین و کودک آزاری در مادران ایرانی: یک مطالعه کار آزمایی بالینی تصادفی

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## Primary prevention of parent - child conflict and abuse in Iranian mothers: A randomized controlled trial

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**Objective:** The aim of this study was to assess whether primary health care settings can be used to engage and provide a preventive intervention to mothers of young children.

**Methods:** Two hundred twenty four mothers who had come to the health centers were randomly assigned to either control group (CG: n = 116) or intervention group (IG: n = 108). Mothers in IG received a parent training. A parenting questionnaire was distributed to mothers at pre - test and after 8 weeks from the last training session.

**Results:** Compared to the CG, there were significant improvements from pre- to post-test in IG on measures of Parenting Scales (PS) total scores and Parent-Child Conflict Tactics Scale-modified (CTSPCm) total scores. This improvement was maintained at 8-week follow up.

**Conclusion:** The results support previous international studies that primary health care settings can be used successfully to engage and provide preventive interventions to mothers of young children.

Practice implications: Within health centers of Iran where parents routinely bring their children for monitoring of growth or vaccinating against some disease, mothers with a child aged between 2 and 6 years received 2-hour- weekly sessions for two successive weeks. The program gave skills for managing misbehavior and preventing child behavior problems. Mothers reported that their behaviors improved from pre-treatment to post-treatment measured at 8-week follow up. The current work may lead decision-makers to organize this program for all of the health centers to train Iranian mothers.

# Children's play pattern and implication for 7 and 9 years old children unintentional injuries

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**Objective:** To study children's play patterns and determine their exposure to risks by age, and sex, in order to gain an understanding of unintentional injuries outdoors.

**Methodology:** A cross-sectional study with children's questionnaires completed in the classroom and, parents' questionnaires completed in the home. Subjects were 476 pupils aged seven and nine years (98.9% response rate) and 471 parents (88.3% response rate).

**Results:** Children's top three favorite activities were: playing football (22.3%), cycling (13.2%), and watching television (12.3%). This differed from those perceived by the parents who reported watching television (20.3%), playing football (13.3%), playing in street (11.4%). Children reported their three top favorite places to play were: street (27.4%), park/playground (18.3%), and home (17.8%). There were significant differences in play patterns by age, and sex. For example, older children compared to younger ones (79.5% versus (vs.) 69.8%, P=0.016), and boys compared to girls (78.5% vs. 70.0%, P=0.035) were more likely to play in the street.

**Conclusions:** The play patterns of older children and boys expose them to more hazardous situations than younger children, and girls. One factor that could affect the rate of injuries might be the mismatch between parents' views on their children's favorite activities and children's reported behavior. The fact that parents were unclear about their children's activities after school may reduce their potential influence on the prevention of injuries.

#### Children's safety in vehicle accident

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Children in ages 4 to 6 have little knowledge of affairs related to traffic. Concept "street" sometimes seems like a motorway to children while sometimes seems like a walkway to them. They are too young to realize right definition of "right" and "left". The processes of learning in these fields usually have defects. Children sometimes think running is an appropriate way of crossing the street. Gradual informing process and educating them about what job can be done in what time is an important issue. These children gradually can learn about some facilities which are specified for pedestrians to cross the street such as pedestrian passing signs (on street surface); they are thinking when they use these areas to pass the street, they will be more visible to drivers and it is effective to show them "safe routes" to school and teach them their usages.

Children also have little knowledge of traffic signs and rules and in ages around 11, their abilities of concentration on relevant information will be lost.

Making decision on moving among traffic flow on streets and calculating distances has always been a difficult task for children below 8. Estimating the time a vehicle get close to you is related to "distance calculation" rather than realizing the speed of the vehicle.

One of the most important differences between children and adults is the issues related to movement in traffic flow (like the moment automobiles are moving on the streets) and issues related to some variables like the mean traffic density on a street. Children rarely stand next to and rarely look around before crossing the street.

Is it possible to educate children to use roads and streets more accurate? There are vast educational programs in some countries in this field for children at schools and had a significant impact on reducing the number of accidents for kids between 3 & 8.

بیماران ترومایی پیچیده ارجاعی به مرکز مفید در سال ۱۳۸۹ و بررسی مقالات درمورد تصمیم گیری برای آنها دکتر لیلی مهاجر زاده، دکتر محسن روزرخ، دکتر احمد خا لق نژادطبری، دکتر علیرضا میرشمیرانی، دکتر ناصر صادقیان دکتر پرند غفاری

## Referral complicated trauma children to Mofid Children's Hospital in 1389 and review of literatures for decision making

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**Purpose**: Differences between children and adults with respect to patterns of injury, physiologic presentation, and management are important, particularly in children younger than 2 years. Physicians who treat injured children must recognize and understand these important distinctions So that the resuscitation process addresses the special needs of the child.

#### **Cases presentation:**

Case 1:3 year old male, multiple injuries followed car accident that referred to us unstable, whit GCS=5, paraplegic, T9 compression fracture, left side pleural effusion and peritonitis. After portable US, Chest, pelvic, neck, spines X ray and prednisolone prescription, first he underwent laparotomy. He had left side diaphragmatic rupture, superficial spleen laceration, none expanding retroperitoneal hematoma, multiple intestinal rupture and rectum laceration. Then he underwent thoracotomy for T9 fixation. 2 weeks after admission followed refractory erosive gastritis, we performed over swing vagotomy and pyloroplasty. 1.5 month after trauma he had sudden death and we suspected to thrombi emboli. Spinal Cord Injury Study (NASCIS-II), 15 it was recommended that all patients with acute spinal cord injuries be administered high-dose methylprednisolone.

The recommendations did not officially extend to pediatric patients, but most centers applied these treatment recommendations to all age groups. The incidence of venous thromboembolism in spinally injured children has been reported, probably incorrectly, to be roughly similar to that in adults. However, series involving only pediatric patients indicate that this complication is extremely rare. Therefore, specific recommendations for prophylaxis of this possible complication vary widely. For adults and, presumably, older children and adolescents, thrombi prophylaxis consisting of low-molecular-weight or low dose heparin in combination with rotating beds, pneumatic compression stockings, or electrical stimulation is recommended for up to 12 weeks after the injury.

Case 2: 3 year female, multiple trauma followed truck accident with pelvic fracture and extensive laceration of rectum, labia, vagina and urethra that head CT scan and all spines were normal. She underwent colostomy, cystostomy, urethroplasty, vagina and rectum repair and pelvic traction. 2 weeks later, after beginning of activation she had sudden death. That probable pathology is thrombo embolism. Trauma patients are at risk for venous thromboembolism. Trauma patients at a higher risk than the general trauma population includes those with coma or severe head injury, spinal cord injury, and severe fractures of the pelvis or long bones. Administration of LMWH is initiated as soon as bleeding has been controlled and there is no intracranial pathology. Additionally, pulsatile compression stocking are used routinely unless there is a fracture.

**Conclusion:** Maltreatment of children has become a significant focus of attention in our society.

# قضاوت والدین وکودکان در مورد امنیت محیط کودکان دکتر حمید سوری

# Parents' and children's judgments about their local environment in relation to children's Safety

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**Objective:** To explore parents' and children's views on safety and danger in their local environment, and the implications for children's outdoor activities after school by children's age, sex and socio-economic deprivation.

**Design**: A cross-sectional study with children's and parents' self completed questionnaires.

**Participants**: 476 pupils age seven and nine years and 471 parents.

**Main results:** One hundred and twelve parents (27.0%) believed that the outdoor places where children usually play after-school are 'not dangerous'.

Three-hundred and six children (65%) believed that the streets where they usually play are safe. Two-hundred and three parents (78.1%) perceived the main roads as the most common hazardous place in their areas and 269 parents (64.7%) believed that there was at least one dangerous place near their home. One hundred and ninety (45.7%) parents believed that the volume of traffic in their neighborhood makes crossing roads difficult. There was no significant difference between the responses of less and more economically deprived parents relating to the presence of dangerous places near their home within less than 5 minutes walk (66.8% vs. 62.5%), on general safety describing their areas as being 'not dangerous' (25.6% vs. 18.8%) and who did not regard the volume of traffic in local environment as making crossing the road difficult (55.3% vs. 53.4%).

Conclusion: Many parents judged their outdoor places where their children played to be safe. About two-thirds of parents reported a dangerous place near their home. No significant differences were found by age, sex and deprivation. If we assume the physical environment of the more deprived areas is a more hazardous place than less deprived areas, it suggests that the risk perception among more deprived parents is poorer. If so, they need to be better informed about hazards in their outdoor environment. Further local environmental information need to be collected in different socio-economic areas to test this assumption.

#### Predisposing factors in birth trauma

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**Introduction**: Birth trauma includes injuries to the infant that are due to mechanical forces (i.e. compression, traction) during the birth process. Its contribution is significant to the high perinatal morbidity and mortality, sometimes long term sequel is reported in developing countries. An estimation of the incidence, types of injury and determination of the risk factors in Mahdieh hospital as one of the busiest tertiary maternity units in Tehran, will simplify prevention and recognition of birth trauma.

**Aims:** The incidence assessment and predisposing factors of birth trauma in our hospital.

**Method:** All birth injury cases that occurred in Mahdieh hospital during March 2007 to January 2011 were retrieved. We collected personal data, predisposing factors and injury types. Excluding criteria were stillbirths, caput succedaneum and anoxic trauma.

Then, statistical analysis was done.

**Results:** There were 24 babies (10 male, 14 female) with birth injuries. More than 50% of birth trauma occurred during vaginal delivery. In our study, babies with the weight between 3.5 to 4kg accounted for 37.5% of birth trauma cases. There was no mortality reported in these cases. 41.6% of mothers in our study were nulliparous and 3 mothers had gestational diabetes.

Conclusion: Abnormal labor and shoulder dystocia are responsible for more than 33% of birth trauma in this research; however, the occurrence of a substantial proportion of cases was in normal labor and delivery. Vaginal delivery should be performed by experienced health providers and careful monitoring. We recommend more proper surveillance at antenatal clinics to have preparation for some cases which are likely suffer from birth injuries. Being aware of maternal and fetal condition and having predisposing factors of birth trauma in mind will be useful to avoid unpredictable injuries.

# ارزیابی ترومای زایمانی دیستوشی شانه در زایمانهای واژینال دکتر زرین آجودانی، خانم شهناز بابایانزاد، خانم صدیقه نصرالهی

#### Assessment of birth trauma of shoulder dystocia in vaginal deliveries

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**Aims:** We sought to determine the incidence of shoulder dystocia in vaginal deliveries and its neonatal complications including Erb palsy and clavicular fracture.

**Methods:** A retrospective clinical study of 13740 singleton vaginal deliveries during 4 years between December2006 and Jan2011 was performed and 71 cases of dystocia were detected and 65 of them were survived.

**Results:** Incidence of shoulder dystocia was 0.52%. Neonatal complications in cases of dystocia was 55% including Erb palsy 45%, claricular Fracture 10%, humeral Fracture 1.5% (one of the cases had one hand Erb palsy another hand humeral fracture)

There was no perinatal mortality in cases of dystocia and All neonates had five minute APGAR score >7. Neonatal hospitalization was (16.9%) which wasn't statically significant between healthy and complicated neonates.

Results show that when 2 maneuvers (suprapubic pressure and McRoberts) were required the incidence of Erb palsy and clavicular fracture was35 %( 29% and 6% respectively) and increased to 49 %( 39% and 10% respectively) when 3maneuvers or more were required, which was statistically significant (p=0.02%) Mean length of first stage and second stage of labor was significantly different in two groups (5.2±10versus4±2.5h) (p=0.02) and (45±3 versus 22±24mean) (p=0.002) respectively.

**Conclusion:** Shoulder dystocia lead to high incidence of neonatal Complications including Erb palsy and clavicular fracture and the type and number of maneuvers used to alleviate shoulder dystocia was related to Erb palsy and clavicular fracture.

فراوانی ترومای زایمانی در نوزادان متولد شده زنده در یک مرکز مرجع – بیمارستان آیت اله موسوی زنجان

خانم فروغ بابلی، دکتر دیانا دیاز

## The incidence of birth trauma among live born neonates at a referral hospital in Zanjan, Iran

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**Background:** Some special problems of neonates are related to the adverse effects of delivery such as birth trauma with high morbidity and even mortality. Birth trauma at delivery is a rare but significant perinatal complication. The aim of this study was to determine the incidence of birth trauma – excluding neonatal asphyxia-and risk factors related to fetal injury in a referral hospital in Zanjan.

**Material and Methods:** In this retrospective study, we reviewed medical records of all 5584 live neonates who were born between 3-11-87 and 24-3-89 at Ayatollah Mousavi General Hospital maternity center.

**Results:** Among all 5584 neonates, 184 were transferred to the NICU ward and 34 (0.6%) of them had physical birth trauma. The most common types of trauma were: lesions to the scalp 15 cases (44.11%) fracture of the clavicle 1 case (2.94%), other injuries to the skeleton 4 cases (11.76%),injury to the brachial plexus 3 (8.82%), other specified birth trauma 6 cases (17.64%), unspecified birth trauma 5 cases (14.70%).

Neonatal birth trauma was more frequent in vaginal delivery (76.47%) than cesarean section (23.52%). However, the incidence of birth trauma in instrumental delivery was high, 5 cases (14.7%).

**Conclusion:** The incidence of birth trauma in this region is 0.6% and birth weight and normal vaginal delivery are strong predictors for birth injuries.

Induction of labor, premature rupture of membranes, higher birth weight and gestational age were associated with fetal injuries. It should be convenient to identify properly any CPD (cephalo-pelvic discrepancy) case in order to avoid injuries.

Additional research is necessary to identify ways to reduce birth trauma and subsequent infant morbidity and mortality.

### نکروز وسیع اسکالپ فاجعه به دنبال زایمان با وکیوم دکتر احمد بذرافشان، دکتر رضا شجاعیان

#### Extensive scalp necrosis as a disaster due to vacuum assisted delivery

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**Introduction:** Despite the decline in the incidence of birth trauma, injury during the birth process continues to be a significant contributor to mortality and morbidity in neonates. Nearly all infants delivered by vacuum extraction will exhibit scalp effects and significant injuries may occur due to wrong placement of the cup, excessive or poorly directed traction, or cephalopelvic disproportion. The incidence of scalp abrasions and lacerations after vacuum extraction is 10%. In this case report, a severe scalp injury due to vacuum assisted vaginal delivery is presented, that led to a disaster for a healthy newborn.

Case presentation: A 2520-grams female was born at 38 weeks of gestational age by vacuum assisted vaginal delivery. Both mother and child were discharged having normal results of routine gynecologic and pediatric exams but after two days the newborn was presented by scalp swelling and gradually tenderness and erythema were developed and finally purulent discharge and extensive full thickness necrosis of posterior scalp were detected. After several surgical debridements, posterior scalp was totally scarified. Thereafter, the skin reconstructed by a split thickness skin graft. Finally the patient became a candidate for plastic surgery and tissue expander placement for coverage of the bold area by normal hairy scalp skin.

**Conclusion:** Instrumental assisted delivery should be performed according to operator's skills and experience as well as the clinical circumstances. Obstetricians and physician should be aware of delivery method and its special risks to assess the newborn correctly and prevent such serious complications.

### ترومای یاتروژنیک مجاری ادراری در کودکان و درمان آن (گزارش یک مورد جالب) دکتر مهران هیرادفر، دکتر مرجان جودی، دکتر رضا شجاعیان

## Urethral injury and treatment in children A case report of successful appendix substitution for cripple urethral injury

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**Background:** Urethral injuries is an unusual type of injury in pediatric.

It generally confined to the male urethra. Three broad mechanisms of injury can be identified: 1- Perineal blunt trauma, typically 'stride' or 'straddle' injuries to the bulbar urethra, 2- Injuries to the posterior and membranous urethra associated with pelvic fractures (usually road traffic accidents in children) and 3- Urethral damage resulting from instrumentation or prolonged urethral catheterisation.

Although urethral trauma is a secondary consideration in children with potential life-threatening trauma, such injuries account for a disproportionate degree of long-term morbidity.

Due to the lack of comprehensive data about the urethral injury in pediatric, the exact way of management also is controversial.

Surgical managements according to type and severity of urethral injury may be fall in one of the following categories:

1- Consevative management in minor injury. 2- Passing and insertion of catheter through the urethra. 3- Early or late primary end to end anastomosis. 4- Urethrotomy. 5- Urethroplasty (stricturoplasty) with buccal mucosa or skin graft. 6- Perineal urethrostomy. 7 - Vesicostomy or Mittrofanoff and 8-The use of substitution for extensive loss of urethral tissue like as appendix.

#### Report of case:

A 5 years old boy referred to us due to major posterior urethral injury with a long gap defect. This injury was occurred during cystoscopy. Multiple reconstruction modalities were failed. Successful reconstruction by the use of appendix substitution was made.

#### **Child Safety Promotion**

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Injuries are a threat to health in every country and are currently responsible for about 10% of world mortality. Injuries (both intentional and unintentional) are a leading cause of death for children and young people (21% of all injuries).

Our outdoor and indoor environments have become more hazardous compared to the past. In addition, the environment has been mainly built up for adults and it is usually difficult for children to cope with the adults' environment. The home (Indoor) environment is a major site of injuries, with about 35% of total children's injuries occurring at home. Most deaths from home accidents occur in children aged fewer than five. As children grow older the predominant type of accident changes. Children aged among 5-14 are more likely to be injured away from home. There are selected interventions for child safety promotion on different types of children's injuries (e.g. parental supervision, use of protective devices, safety regulations, child education, etc).

Children have different pattern of injuries. Rates of outdoor accidental injuries are higher in older children, boys and more economically deprived children. Some studies presented some of explanations regarding these variations in other age groups and other situations. There are still many unanswered questions about children's injuries. The role of parental permission, children's play patterns and exposure to risks, children's perception of safety and danger, and their risk-taking behaviour are considered. In conclusion, Child Safety Promotion is essential in any community particularly among those that are in developing process. Children have different pattern of lifestyle, and different physical, mental and social status, and their behavior expose them at more risk of injuries. They are usually victims of our faults and errors. It is their right to live in a safe community to be able to play safely, and this is the adults' responsibility to create such an environment and promote the safety of children.

## درمان اولیه ترومای کودکان در بخش اورژانس دکتر محمد امین زارع

#### **Early Pediatric Trauma Care in Emergency Department**

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The primary survey or initial phase of resuscitation in a child should address life-threatening injuries that compromise oxygenation and circulation. Make evaluation of the child's ABCs, disability, and exposure the priority of this initial phase. Airway control is the first priority. A child's airway is anatomically different from an adult's. A child has a shorter neck, smaller and anterior larynx, floppy epiglottis, short trachea, and large tongue. If oral intubation is indicated, use the jaw-thrust maneuver to improve airway patency. All pediatric trauma patients must be assumed to have cervical spine injury until proven otherwise. Thus, if oral intubation is indicated, in-line cervical spine immobilization must be performed. If oral intubation is contraindicated in patients with severe maxillofacial or laryngotracheal trauma, needle cricothyrotomy is the next step. Surgical cricothyroidotomy is rarely indicated in infants or small children because of the high association with secondary subglottic stenosis. Once a patent airway is established, the child's breathing should carefully be assessed. If respiration is inadequate, ventilatory assistance is provided. Infants and small children are primarily diaphragmatic breathers; their ribs lack the rigidity and configuration present in adults. As a result, any compromise of diaphragmatic excursion significantly limits the child's ability to ventilate. Recognizing hypovolemic shock in pediatric trauma patients is essential to ensure a positive outcome. Obvious signs of shock, such as hypotension or a decrease in urinary output, may not occur until more than 30% of blood volume has been lost. Ideally, 2 percutaneous intravenous catheters in the upper extremities are placed. If peripheral venous access cannot be obtained after 3 attempts or in less than 90 seconds, intraosseous access should be considered.

Initial fluid resuscitation should consist of warm isotonic crystalloid solutionat a bolus of 20 mL/kg. The goals of the initial resuscitation should be to achieve hemodynamic normality and to restore adequate tissue perfusion as soon as possible. Children with evidence of hemorrhagic shock who fail to response to fluid resuscitation should also receive blood (10 mL/kg) and are evaluated by a pediatric surgeon for possible operative intervention. Once the primary survey has been completed, address the issue of pain control. Pain relief can be provided with morphine (0.1 mg/kg) or a combination of fentanyl (1 mcg/kg) and midazolam (0.5-0.1 mg/kg).

Definitive treatment can be accomplished safely once hypoxia, tachycardia, hypotension, and hypothermia have been managed. The secondary survey involves a more detailed systemic evaluation and initiation of diagnostic studies. Early surgical evaluation is important for high risk patients. The data emphasize the importance of early surgical evaluation of high-risk injured pediatric patients. As with adults, radiographic evaluation of the cervical spine, chest, and pelvis has become an integral part of assessment of injured children. Radiographic evaluation of the pediatric cervical spine can be challenging because of normal anatomical variants and should be performed by experienced personnel. Diagnostic peritoneal lavage (DPL) has a limited role in the assessment of intra-abdominal injury. Children are more likely to have solid organ injury without hemoperitoneum; therefore, a CT scan is preferable. DPL is indicated for children with coexisting injuries (eg, head or orthopedic injuries) requiring immediate surgical intervention and with no time for CT scanning. FAST is slowly gaining acceptance as a reliable method to evaluate patients with trauma, particularly individuals who are hemodynamically unstable. FAST has several advantages over CT scan and DPL. FAST is portable and easy to use, and it can be performed in minutes. It is noninvasive, fairly accurate in identifying fluid in the peritoneal cavity or pericardial sac, and costs less than CT scan. Nevertheless, a FAST examination can miss significant spleen or liver injury.

## ترومای یاتروژنیک در بیماران NICU

دكتر عبدالله موسوى

#### **Iatrogenic trauma in NICU patients**

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**Introduction:** The vast majority of preterm and severely ill newborn infants is monitored and managed using an arterial and venous catheter. It is associated with various complications, such as hemorrhage, thrombosis, infection and vascular perforation.

**Case:** We report some cases of severe tissue ischemia and foot amputation after catheterization in Newborns and review the management. **Results:** vascular catheterization have been associated with many complications such as local vascular (blanching or cyanosis of tissue) or more extensive ischemic compromise, Necrosis of the limb or even amputation.

**Conclusion:** However vascular catheterization is safe and routinely used in treating neonates in NICU; it is associated with various complications and must exactly monitor these routes.

#### مدیاستنیت حاد به دنبال پارگی پاتروژنیک مری

دکتر احمد خالق نژاد طبری، علیرضا میر شمیرانی، دکتر محسن روزرخ، دکتر لیلی مهاجرزاده، دکتر نسیبه خالق نژاد طبری، دکتر پرند غفاری، دکتر شقایق حساس یگانه

# Clinical analysis of acute mediastinitis in Children, due to iatrogenic perforation of esophagus

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**Background:** Acute mediastinitis is a serious medical condition with a mortality rate from 30 to 40% or even higher. Early diagnosis with prompt and aggressive treatment is essential to prevent its rapid progression. We have evaluated our cases with acute mediastinitis, and have analyzed the outcomes.

**Methods:** A retrospective chart review was conducted of patients diagnosed with acute mediastinitis who had admitted in our hospital between January 2001 to January 2010.

**Results:** Seventeen patients one to ten year old (mean =3.8) were reviewed.12 (7%) boys, and 5 (30%) girls. The most common symptoms were fever dyspnea, cyanosis, tachycardia and tachypnea. The etiology of mediastinitis was esophageal perforation (EP) in 13(77%) due to esophageal dilatation or endoscopy, and leakage of esophageal anastomosis in 4 (33%). The Underlying disease were esophageal atresia 2(12%), corrosive injury of the oesophagus 13(76%), congenital esophageal stenosis one (6%), and gastroesophageal reflux esophagitis one (6%) patients. Patients with clinical symptoms were evaluated by immediate chest radiography, and some questionable by gastrographin swallow, after early diagnosis, the patients received wide spectrum antibiotics and immediate mediastinal or thoracic drainage, followed by esophagostomy and gastrostomy only one case of endoscopic perforation managed by NG tube. Sixteen patients (94%) survived successfully. We had 2(12%) mortality in our study (one patient, after esophageal substitution, mediastinal abscess and septicemia, and the other 6 months after early management during endoscopic dilatation developed esophageal perforation and cardiac arrest.

**Conclusion:** prevention of acute mediastinitis is still a difficult challenge. As the prognosis is not good, and patients have high mortality, so rapid and aggressive management is mandatory.

### پارگی یاتروژنیک کبد در یک نوزاد پره ماچور دکتر مریم قوامی عادل ، دکتر سید مجتبی موسوی خوشدل

#### **Iatrogenic hepatic laceration in a premature infant**

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**Introduction:** Umbilical vein catheter insertion may have many complications such as thrombus formation, embolism, vessel perforation, hemorrhage, infection and direct injury to liver. Laceration is a mortal complication of umbilical vein catheter that may cause injury through the liver parenchyma. The newborn liver is very prone to iatrogenic rupture resulting in a high morbidity and mortality.

Case presentation: A 3 day's premature boy (26 weeks) from C/S referred to our center with probable umbilical vein traumatization. Early after birth he was intubated due to respiratory distress and received surfactant. There was an unsuccessful umbilical catheterization in that center and then the abdomen began to distend. There was free fluid in the abdomen without solid organ injury in the first ultrasonography. During the admission the patient received packed cell, platelet and FFP but because of increasing the intraabdominal fluid and decreasing the hemoglobin we planned mini explorative laparotomy on the third day of admission. There was free blood in abdomen with laceration in right hepatic lobe. The laceration repaired and the patient followed by physical examination and ultrasonography. There was no active bleeding during the follow up but unfortunately the patient died 9 days after operation due to heart failure and impaired homeostatic state.

Conclusion: The parenchyma of liver in neonates is fragile, and the capsule is very thin, unlike that in the pediatric and adult patient. So the management of hepatic injuries in neonates is not usually successful. Again like other cases prevention is the most effective management. Insertion of umbilical vein catheters must be done very carefully by trained ones especially in preterm fragile infants.

# توده شکمی (سودوکیست پانکراس) به دنبال کودک آزار دکتر میرنظام میرچرخچیان

#### Abdominal Mass (Pseudocyst of Pancrease) due to Child Abuse

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**Introduction:** Pseudocyst is a complication of pancreatitis. Most commonly pancreatic pseudocysts in children are the result of trauma.

Aims: Taking a careful history and early best treatment in large cysts.

**Method(Case):** A 3.5 years-old boy admitted to emergency ward with abdominal pain anorexia weight less and vomiting. He has a large palpable tender mass in epigaster. Abdominal CT scan report a Cystic mass in retroperitoneum, with shifting stomach and other near organs, suggestive pancreatic Cyst.

In Laparotomy a large mass was seen that displaced stomach to upper and forward. The lesser Sac was opened and Cyst aspirated.(dark, yellow fluid). RoxenY Cystojejunostomy (Internal drainage) was performed. The child 7 days after operation discharged with full good Condition.

**Results and Conclusion:** Although before operation the child's parents denied, but careful history after operation revealed the patient has been abused by his stepmother. Many of children are exposed risk of child abuse. In children with abdominal mass trauma etiology must be consider in mind, Such as pseudocyst of pancrease due to damage of its ducts. In large pseudocyst internal drainage is best treatment.

Acute pancreatic pseudocysts smaller than 5 cm are managed with observation for 4-6 weeks because most resolve spontaneously. Chronic pancreatic pseudo Cysts (>3 mo) usually undergo ultrasonographic-guided percutaneous drainage, endoscopic drainage, or internal drainage via Cystgastrostomy or enterostomy.

However pseudocysts larger than 5 cm in diameter may require surgical intervention but conservative therapy must be continued for 4-6 weeks for the maturation of the cyst wall. Study results indicate that pancreatic pseudocysts larger than 10 cm in diameter in children are associated with increased risk for spontaneous rupture.

# عواقب دراز مدت کودک آزاری و کودک فراموش شده دکتر فریبا تبریزیان و دکتر سید محمد علی رییس السادات

#### Long - Term Consequences of Child Abuse and Neglect

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The impact of child abuse and neglect is often discussed in terms of physical, psychological, behavioral, and societal consequences. In reality, however, it is impossible to separate them completely.

Outcomes of all abused and neglected children very widely and are affected by a combination of factors, including;

- The child's age and developmental status
- Type of abuse
- The frequency, duration and severity
- The relationship between the victim and his or her abuser

The immediate physical effects of abuse or neglect can be relating minor (bruises or cuts) or severe (broken bones, hemorrhage, or even death).

Shaken baby syndrome is a common form of child abuse.

In some cases, to cause important regions of the brain to fail to form or grow property, resulting in impaired development.

Also, there is a relationship between various forms of household dysfunction and poor health.

Psychological consequences: The immediate emotional effects or abuse and neglect – isolation, fear, and an inability to trust – can translate into lifelong consequence, including low self-esteem, depression and relationship difficulties.

Behavioral consequences: Behavioral problems, for example, difficulties during adolescence, adult criminality, alcohol and other drug abuse and abusive behavior appear to be more likely among this group.

Societal consequences: While child abuse and neglect almost always occur within the family, the impact does not end there. Society as a whole pays a price for child abuse and neglect, in terms of both direct and indirect costs.

Summary: Much research has been done about the possible consequences of child abuse and neglect. The effects vary depending on the circumstance of the abuse or neglect, personal characteristics of the child, and the child's environment. Consequences may be mild or severe, disappear after a short period or last a lifetime, and affect the child physically, psychologically, behaviorally, or in some combination of all three ways. Ultimately of all due to related costs to public entities such as the health care, human services, and educational systems, abuse and neglect impact not just the child and family, but society as a whole.

### پارگی یاتروژنیک راه هوایی (معرفی یک بیمار جالب) دکتر هوشنگ یورنگ، دکتر مسعود ناظم

#### **Iatrogenic airway perforation: case report**

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**Background:** With the invention of rigid and fiberoptic bronchoscopy, bronchoscopy has a special role for the diagnosis and management of pediatrics even at their bed sides in NICU, PICU or emergency ward.

The most common indications for bronchoscopy are different kind of stridor and foreign bodies. Performing bronchoscopy in trained hands is a safe and effective diagnostic and therapeutic instrument; otherwise it may be hazardous with dangerous complications such as hypoxias, hypercarbia, bradicardia, laryngospasm pneumothorax, subglotal edema, bleeding, bronchial laceration, pulmonary artery laceration, fever and in rare cases child death. Here we explain a child with massive pneumothorax and generalized subcutaneous emphysema after a diagnostic bronchoscopy.

Case report: A 6 years old boy with 6 months history of coughing and recurrent respiratory tract infection had a diagnostic rigid broncoscopy and referred to our center as a spontaneous pneumothorax, the patient has sever pneumothorax with subcutaneous emphysema. After inserting chest tube that had sever air leak, the subcutaneous emphysema also began to expand and we had to perform multiple skin incisions in different parts. According to patient instability, the patient underwent right thoracotomy urgently. There was a tearing in right upper bronchus that was repaired. After more investigation the foreign body (a plastic toy ball) exposed in right lower bronchus which was extracted via bronchotomy.

The child had an uneventful recovery and discharged without any complication. **Conclusion:** bronchoscopy is a life saving procedure in experienced hands as

well as it can be hazardous in inexperienced ones.

#### Pediatric vehicle trauma in Iran and comparison with the world

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Childhood injury is a major public health problem that requires urgent attention. They are responsible for about 950 000 deaths in under the age of 18 years each year. Globally, 22.3% of childhood injuries (10.7 per 100 000 children) belongs to road traffic injuries (RTIs). Children, use the roads as pedestrians, bicyclists, motorcyclists and occupants of vehicles. They may live close to a road, play or even work on the roads. All these interactions with roads, together with a range of other risk factors associated with childhood, increase the susceptibility of children to road traffic injury. RTIs are the leading cause of death among 15–19-year-olds and the second leading cause among 5–14-year-olds. Boys and children from low and middle income countries are more likely to be involved in RTIs. The head and limbs are the most common parts of the body injured in children involved in road traffic crashes. The severity of injuries will vary, depending on the age of the child, the type of road user and whether protective devices were used.

Iranian children just like other children of the world are affected by speeding and drink-driving, by not using safety equipment and by factors related to vehicle safety and the road environment. However, there are also risk factors (e.g. physical and cognitive development, risk-taking behavior, peer influence, their perception to risk) that are specific to children.

In Iran, about 16.6% of all children's deaths belong to unintentional injuries. The top three causes of deaths are RTIs (37.5%), drowning (17.9%), and burns and scalds (12.1%). RTIs are more likely to be happened among older children, boys and those from low income families.

About 13% of total population of EMR and 1.1% of the world's population live in Iran. Furthermore, only 0.13% of the world vehicles are in Iran. A big number of deaths from RTIs in Eastern Mediterranean Region (EMR) with 22 countries occur in this country (about 30% and 1.9% of all fatal injuries of the region and the world respectively). While the average RTIs death rates are 18.8 and 32.2 per 100 000 population in the world and in EMR respectively, this figure is 35.8 in Iran.

### بررسی بالینی و اپیدمیولوژیک سوختگی کودکان در تهران ۲۰۰۵–۲۰۰۸ دکتر کریمی، دکتر مهتاب وثیق، دکتر امیر رضا معتبر، دکتر منصوره سبزه پرور

### Epidemiological and clinical profile of pediatric burn in Iran, Tehran, 2005-2008

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**Introduction**: Burn-related injuries among children are global phenomena.

Children with severe burns often suffer from impaired mental and physical development, prolonged pain and endure large medical expenses to the family and medical system.

**Aims**: The objective of this study was to identify the epidemiologic features of pediatric burn injuries in Tehran. These data will be used as a basis for developing targeted preventive programs to protect children from burns. Health system policy makers need to have enough information about burn victims to prepare care facilities.

**Methods:** It is a retrospective study of all children 15 or younger that referred to Tehran Motahari center from 2005 to 2008. The out-patients were not included in the study. Relevant data were retrieved from the burn treatment registry.

The following were recorded: age, gender, and place of burn, site of injury, seasonal variation, cause, and extent of burns, length of hospital stay, and mode of therapy, result, and mortality rate. SPSS 15 was used for data analysis.

**Results:** children were categorized into four groups, the infants (0-1year), and toddlers (1–2 years), early childhood (2–6 years) and late childhood (6–14 years). In the first three groups scalding was the predominant cause of injury while in late childhood there were more flame and electric burns. Males were mainly affected. Most of the burns were in summer. The overall mortality rate was 10%. Length of hospital stay increased in accordance with burn area. The most mortality rate was 53.8% in age group 13-14 while they included only1.5% of all. Fire related burn injuries accounted for 57% of the deaths and 53% were due to scald.

Conclusion: Burn centers in Tehran as the capital of Iran are limited; health system policy makers need to have enough information about burn victims to prepare care facilities. Infants were found to be at greatest risk for a burn injury, while older children were at higher risk for severe burns. Prevention programs should target these high risk groups. An intense campaign to make people aware of the risk factors and their avoidance is required to reduce the number of burn accidents in children.

### سوختگی الکتریکی در کودکان

دكتر محمد على رييس السادات، دكتر فريبا تبريزيان

#### **Electrical Injury in Children**

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**Introduction:** Electrical Injuries although not common in burn centers, but they are very serious and their managements difficult. Electrical Injuries are account for 3 percent of all burns-related injuries and one of third of them fatal. It is estimated one of third of electrical injuries in children below 6 years old. Three main forms of electrical injury exist, low voltage burns (less than 440 volts), high voltage burns (greater than 1000 voltage) and super high voltage burns (like lightning). A common injury although none contact, in these injuries is intense flush burn resulting from the electrical circuitry. (ARC Injury)

**Aim:** In this study we review cases with Electrical Injuries after acute phase for Reconstruction

**Method & Material:** we review the data sheet of patients under 12 years that refer for repair and reconstruction after acute phase of Electrical Injury.

**Result:** We found 15 cases in recent 2 years (2009-2011). Most of them (12) had hand injuries and fingers contractures, one nose and 2 with foot fingers injuries. 8 of them had an operation before coming to our hospital. 6 of our patients have reoperation 3 to 12 months later.

**Conclusion:** Management of Electrical injuries is complex, chronic, difficult and unpredictable

### اپیدمیولوژی بیماران بستری بعلت سوختگی در بیمارستان موسوی زنجان ۱۳۸۸–۱۳۸۹ فروزان بابلی، فاطمه قربانی

#### Epidemiology of hospitalized burn patients in Mousavi Hospital, Zanjan,during 2009-2010

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**Aim:** The objective of this study was to describe the epidemiology of burn injuries referred to Mousavi Hospital, Zanjan and to provide information necessary for planning and implementing an effective prevention program.

**Material and methods:** The medical records of 100 consecutive admissions for pediatric burn injury treated at Mousavi hospital over one-year period (August 2009 to August 2010) were reviewed. This retrospective study tries to describe the epidemiology of burns in children less than 12 years-old admitted at Ayatollah Mousavi from Tir 1<sup>st</sup> 1388 to Khordad 31<sup>st</sup> 1389. This the first time that a study of this class is conducted at this newly created modern center.

**Result:** Of the pediatric patients studied, the proportion of children with burn injury the body surface area (BSA) ranged from 1% to 60%, average of burning was 13.32% and the male/female ratio was 1.56:1. The ratio of children aged <0 r=3 years to those >3 years was1.56:1. The rural/urban ratio was 4.58:1, and the seasons was predominantly winter. The anatomical sites of burn that could be found were at the lower limbs (85 %). The peak hours of pediatric burn were between 10:00 and 16:00. Scalding was, by far, the most predominant reason for burn. The majority of the studies reported the highest proportion involved in moderate burn, and the lowest proportion was for critical burn. The mortality rate was 2.2%, and infection was the most common cause of death.

**Conclusion:** Considering the national proportion of children, a high proportion of hospitalized patients with burn injury were children; those who were male, aged <or=3 years, and lived most of the time indoors were especially susceptible. Great attention should be paid when hot water is used or during suppertime.

More work is required to establish effective, sustainable community-wide prevention programs in developed and developing countries. Effective pediatric burn prevention programs for Zanjan should acknowledge parent and child literacy, how and where information is best accessed the need to adapt effective hazard reduction programs to informal settlements, and the importance of legislated minimum safe housing standards. This requires significant commitment from Government, communities and individuals.

#### **Key points in nursing care of traumatic children**

#### Safavi F

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Childhood trauma results from such events as automobile accidents, pedestrian accidents, falls, sporting injuries, child abuse and drawing.

Falls are the most common cause of pediatric injury. Children of varying ages are susceptible to various forms of injury due to their developmental level as well as their environmental exposure. Young children also are not developmentally equipped to be able to recognize dangerous situations.

Pediatric trauma management

- Ask health history when the injury happened
- Clear the air way of obstruction and start CPR if the child lost conscious.
- Physical examination. Assess critical neurologic functions.
- Estimate blood loss

Fluid Management is an important aspect in the resuscitative care of the injured child. Fluid Management has to always center on maintaining oxygen delivery in order to perfuse vital organs to avoid tissue ischemia.

Non operative management of pediatric traumas pediatric is widely accepted. Other strategies are needed in thermodynamically unstable children.

If the child is showing signs of a possible internal hemorrhage laparotomy can be as an alternative.

### **گزارش موردی: پرفوراسیون معده در کودکان** دکتر مهران پیوسته، دکتر نصراله استادیان، دکتر شهنام عسکرپور

#### Case report: gastric Perforation in Children

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Gastric Perforation after barotraumas in pediatric age group is an unusual Problem, with high risk of mortality and morbidity.

We present a rare case of 3.5 years old boy; that had ingested compressed air through his mouth.

He was referred to emergency department of Imam Khomeini hospital. On admission he complained of abdominal pain, and severe abdominal distention .At the physical examination, he was pale with respiratory distress, bilious vomiting. After admission he underwent an emergency exploratory laparotomy. Stomach was perforated at anterior wall; perforation extended from cardia to lesser curvature, the perforation was repaired.

In the sixth day of operation liquid diet was started but after 24 hours abdominal distention and generalized abdominal tenderness appeared. At laboratory evaluation hypokalemia (< 2.5 meq/l) was diagnosed. By correcting hypokalemia patient soon recovered and was discharged.

### ارزیابی لب خشک به عنوان نشانه جدید آپاندیسیت در کودکان دکتر عبدالحمید عمویی، دکتر توکلیان

#### Evaluation of dry Lips as a new sign of appendicitis in children

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**Introduction:** Appendicitis is the most common cause of emergency abdominal surgery in children. Diagnosis before surgery was always a problem. One of the remarkable symptoms in dealing with patients with suspected appendicitis is dry and scaly lips. Therefore, to investigate the relationship of this sign and appendicitis, present study was conducted.

**Materials & Methods:** This cross-sectional study was conducted in a three-month period, all the patients less than 18 years admitted with complaints of abdominal pain. Possible diagnosis was appendicitis based on history, clinical examinations, laboratory tests and abdominal sonography. Alvarado score, pediatric appendicitis score (PAS) and pathological results were recorded. Collected data were analyzed by descriptive tests using SPSS analyzing software. **Results:** 25 patients entered the study, 11 patients (44%) male and 14 patients (56%) females with mean age and SD 11.88± 4.77 years old. In pathology reports on 13 patients (52%) Acute appendicitis, in a patient (12%) acute purulent appendicitis, in seven patients (28%) suppurative appendicitis, in one patients (4%) were ruptured appendicitis and for one patients (4%) normal appendix was reported. Pain shifting in 20 patients (80%) and dry lips in 22 patients (88%) was observed. Alvarado average score of the patients was 7.04± 2.28 and PAS average score 7.24±1.71.

Conclusion: Early diagnosis and appendectomy before gangrene or rupture of the appendix will reduce complications of this disease. Therefore, early diagnosis of this disease is important. Sign of dry lips in 22 patients (88%) in compare with other signs and symptoms is not likely to have lesser value. According to the findings of this study further evaluations are valuable.

تاثیر تزریق بوتوکس در درمان تورتیکولی کودکان (مطالعه ۴ ساله در مرکز طبی کودکان در میار اشجعی

#### **Torticollis**

## Effectiveness of Botox injection in treatment of children suffering from torticollis (4 years study in children Medical center)

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**Background:** Torticollis means a twisted neck in which the chin turns to other side. Two kinds of torticollis are known. In one kind the cause of torticollis is genetic factor. And in other kind of torticollis it is due to damage to nerve fibers or muscles in the neck. One of the most causes of muscle or nerve damage is obstetric trauma. Treatment of congenital tortcollis is passive stretching and positioning in infant. It response to this management if started before 3 months of age, some drugs like baclofen and botulinum toxin injection are used for intractable torticollis in some centers and rarely surgery is needed for muscle releasing. In some references the need for surgery estimated near 15% of all cases.

Case Presentation: In 4 years we studied 18 infants which referred to children medical centers with torticollis due to obstetric trauma. Our cases were from 1m to 4m.we started the treatment with positioning and physiotherapy. In 14 cases they had good response to this treatment. And almost all of them were symptom free at the end of first year of life. In 4 cases the torticollis was intractable and didn't show any response to this management. Therefore they prepared for Botox injection in 3 months period from 2 to 4 injections. At the inter wall of injections we continued physiotherapy or passive muscle stretching. 3 cases were symptom free at the end of second year of life. One patient had not any response to this treatment probably because of hypertrophy of SCM muscle that was seen by sonographic evaluation. Therefore this patient was operated when he was 4 years old.

**Conclusion**: Toxic botulinum injection can be a useful management for intractable torticollis with no serious complication. In our study only one patient has undergone operation that is almost 5% of all cases. Therefore the need for surgery can become lower than traditional management from 15% to 5% by using of Botox Injection in congenital torticollis which they are candidate for operation because of intractable muscle contraction.

### فراوانی نسبی کودکان، ترومای غیر نافذ شکم در کودکان برپایه سن و جنس و نوع تروما دکتر مسعود ناظم، دکتر امیرحسین داور پناه جزی

## Relative frequency of children with blunt abdominal trauma based on age, gender, and type of trauma

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**Introduction:** trauma is one of the most common causes of mortality among children. In our country no study performed to identify frequency of blunt trauma among pediatric population. Present study designed for evaluation of epidemiological parameters like age and sex distribution, frequency of intraabdominal and extraabdominal injured organs, mortality, and ... among children with blunt trauma.

**Methods:** this prospective study performed among children less than 14 years admitted with blunt trauma in Ayatollah Kashani hospital during 1997-1999. Demographic data such as age, sex, diagnostic and therapeutic modalities, and mortality rate were collected. All data were analyzed by SPSS ver 11 using descriptive statistics. P value less than 0.05 considered statistically significant.

**Results:** one hundred thirty three patients were enrolled in present study. Most of them were male (68%) and have 6-8 years old age (25%). Most common injured organs were liver (28%) and spleen (24%). Kidneys, complex abdominal organs, and hallo viscous injuries were other common injured organs respectively. 51 patients were operated and 82 subjects managed conservatively. Both operated and non operated patients evaluated by all plain abdominal and chest X rays, ultrasound, and ct scan (63% and 73.2% respectively). 5 patients were died due to trauma 3 of them due to spleen injury, one patient due to liver injury, and one child due to co-existing liver and splenic injuries.

**Conclusion:** abdominal trauma mostly affected boys age 6-8 years and caused commonly liver and spleen injury. Splenic injury was the leading cause of mortality among children with blunt abdominal trauma.

#### بلع آهن ربا در کودکان خطرناک است

دکتر هدایت اله نحوی، دکتر منصور ملاییان، دکتر هوشنگ پورنگ

#### Swallowed magnets in children are dangerous

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Introduction: children inevitably put foreign bodies into their mouths and swallow some of them .Most swallowed foreign bodies pass harmlessly through the gastrointestinal (GI) tract. Foreign bodies that damage the GI tract, become lodged, or have associated toxicity must be identified and removed. Children with preexisting GI abnormalities are at an increased risk for complications. children usually swallow radiopaque objects, such as coins, pins, screws, button batteries, or toy parts like magnets .when a child swallows multiple magnets, they may be attracted to each other from within the child's intestines and/or colon and cause a serious risk such as necrosis and perforation intestinal obstructions (adhesions, volvulus), bleeding, peritonitis, sepsis and death, therefore those need immediate medical care, early diagnosis and urgent suitable surgery. About 20 percent of non-food items swallowed by children between the ages of 6 months and 3 years old require surgical removal. In a report from USA since 2003, one child has died and 19 others have needed surgery after swallowing small, powerful magnets used in toys.

Aims: key points for prevention and management.

**Method:** between 1996 to 2011, in 2 children hospital, demographic, presentation, investigations and surgical data of patients admitted with foreign bodies and magnets swallowing were assessed.

**Results**: 6 cases had magnate swallowing between 2to 8 years old aged. most had delayed presentation of acute abdomen and had not a obvious history of swallowing of magnet and were diagnosed after abdominal x. ray and surgery. **Conclusion:** Children under three years of age and older who may still frequently mouth objects such as small loose toy parts are dangerous choking, ingestion and inhalation hazards. These items and products with small magnets must be kept out of the reach of young children. Any children with a history of swallowing of any non food objects, demand immediately medical care, a radiograph (X-Ray). Any children has swallowed multiple magnate that passed beyond the stomach, required urgent surgical intervention

# ترومای فرمان دوچرخه، یک صدمه قابل پیشگیری در کودکان دکتر امید امان اللهی

#### Handle Bar Trauma, a preventable injury in children

#### Amanollahi O

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**Introduction:** Bicycle Handlebar trauma is an important Cause of injury in children and results in morbidity and even mortality in children. It seems preventable with modifying bicycles design or addition some device on bicycles. This study is a case series and presents 5 children who underwent surgery because of their handle bar trauma over 1 year period in Imam Reza hospital (Kermanshah – IRAN)

**Aims:** We suggest that handlebar trauma is a preventable kind of trauma and with presentation of these cases we want to show harmful potential of handlebars and Necessity of their changing by manufacturers. .

**Method:** This is a retrospective study on 5 children who admitted to Imam Reza hospital of Kermanshah because of bicycle Handle bar trauma and underwent surgery because of signs and symptoms of acute abdomen between April to March 2010.

**Results:** We operated on 5 children with clinical sign of peritonitis, all of them had abdominal blunt trauma due to contact of bicycle handlebar and its pressure effect. Two cases had pancreatic transaction, one had pancreatic contusion and mesenteric rupture another one had sigmoid colon perforation and last one had spelenic rupture. We did distal pancreatecomy with spleen conservation in two cases, pancreatic debridment and drainage in another one, colostomy and entrolysis in one case and splenctomy in last one. All of cases recovered and discharged from hospital.

Conclusion: Handlebar trauma is very common between school age children it can results in many morbidity and some mortality in pediatrics and it can induce a lot of disabilities and damages in children. Many kinds of injuries to solid organ and hollow viscus organs have been reported until now. we think most of these injuries are due to shape, form and kind of handlebar's and bicycle manufacturers should be made aware of these dangers because they can change these factors and prevent most of these catastrophes.

#### Disc Battery, a danger for children

#### Amanollahi O

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**Introduction:** Small size disc batteries are used in many instruments like toys, Watch's, remote controls, etc... most of them are available for small children. These batteries contain Heavy metals and caustic solutions that make them very dangerous for children. If swallowed, they can damage by few mechanism such as mercury poisoning, pressure necrosis, corrosive and electrical injury to alimentary tract.

Unfortunately their swallowing by babies is increasing in recent years because of their attractive appearance and small size.

**Aims:** With presentation of some damaged children we want to show and emphasize on hidden dangers of disc batteries and give attention to parents for more care of their children and advise to disc battery manufacturer to modify and change these products to increase its safety.

**Method:** We reviewed the medical records of 11 children aged between 10 months and 6years old who admitted in Imam Reza hospital of Kermanshah due to disc battery ingestion from April 2007 through march 2010 .Diagnosis was based on history ,physical exam and radiography. Data's reviewed included: Sex –age –clinical manifestations and hospital course.

**Results:** We found 11cases (2boys and 9 girls) of disc battery ingestion, Endoscopy was done in 8 cases, from whom we retrieved batteries by endoscopy in two cases, and 4 cases underwent surgery because of complications (2 cases of esophagotomy, 1case of gastrotomy and 1 case of entrotomy) Necrosis, perforation and peritonitis were reasons of operations.

5 cases were under observe only, and passed batteries spontaneously without complication. We hadn't any mortality and all cases recovered completely.

**Conclusion:** Although most of disc batteries ingestion have uneventful courses but some of them impacts in G.I. Tract and complicated with necrosis or perforation of alimentary tract that results in morbidity or even mortality.

Endoscopy is first line of treatment when batteries is in esophagus or stomach, but if they passed from stomach, closed observation recommended and in cases of impaction or complications, surgery strongly recommended because of potentially severe dangers.

محصولات موضعی برای درمان اسکار: یک مطالعه کار آزمایی بالینی تصادفی برای مقایسه بین ورق های سیلیکونی، پوشش های فشاری وژل کنتراکتبکس دکتر محمد هادی رفیعی، دکتر مهدی راستی

#### Topical Products for Scar Treatment: A Randomized Clinical Trial for Comparison between Silicone Sheet, Pressure Garment & Contractubex Gel

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**Aim:** Although many products are available to treat scars there is not standard treatment for it. Contractubex has been used with variable degrees of success in treatment of hypertrophic scars, although earlier reports suggested a significant degree of improvement. In this study scar improvement by contractubex (group 1) were compared with two standard modalities in burn scar treatment-garment pressure (group2) and silicone sheet (group 3).

**Methods:** This is a randomized clinical trial that was done on 3 groups of patients. Ninety patients with scars & hypertrophic scar less than 3 months due to second degree burn at upper arm entered to this study. The effect of contractubex was compared with effect of pressure garment and silicone sheets after 12 weeks. Vancouver burn scar (VBS) scale was used for assessment of improvement.

**Results:** Three groups were matched. All scars showed signs of clinical improvement after 3-6 weeks but the results were evaluated after 3 months. The VBS score from  $11 \pm 1.3$  to  $8.2 \pm 1.9$ , in group1; the difference was statistically significant (P < 0.04; paired t test). In group2, VBS score decreased from  $10.8 \pm 1.7$  to  $6.6 \pm 1.9$  (p<0.004), in group 3 from  $11 \pm 1.46$  to  $7.1 \pm 1.6$  (p<0.013).

**Conclusion:** the results of our study in prevention of hypertrophic scars indicated although there was statistical significant improvement in VBS scale in all groups, but there were more significant degree of improvement in group 2 & 3. Contractubex can significantly improve all indexes, but height of scar had more improvement in comparison to other indexes in contractubex group.

#### ارزیابی بالینی بلع باتری دیسک در کودکان

دکتر علیرضا میرشمیرانی، دکتراحمد خالق نژاد طبری، دکتر جعفر کورانلو، دکتر محسن روزرخ، دکتر فتح اله روشن ضمیر، دکتر سجاد رضوی، دکتر علی اکبر سیاری، دکتر فرید ایمانزاده

#### **Clinical Evaluation of Disc Battery Ingestion in Children**

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**Background:** The purpose of this study was to evaluate the characteristics, management, and outcomes of disc battery ingestion in children.

**Methods:** We reviewed the medical records of children aged between 9 months to 12 years old admitted in Mofid Children's Hospital due to disc battery ingestion from January 2006 to January 2010. The diagnosis of disc battery ingestion was based upon history, clinical symptoms, and results of imaging studies. The clinical data reviewed included age, gender, clinical manifestation, imaging findings, disc battery location, and time of ingestion, endoscopic results and treatment.

**Results:** we found 21 cases (10 males and 11 females) of disc battery ingestion with a mean age of 4.3 years (range 9 months to 12 years). The common symptoms were vomiting, cough, dysphasia and dyspnea. The Mean duration of ingestion was 18.3 days (4 hours to 8 months). 18 patients had history of disc battery ingestion, but three cases referred with above symptoms, and battery was accidentally found by X ray studies. Only three cases had their batteries impacted in the esophagus. Twelve batteries were removed endoscopically, five batteries spontaneously passed through the gastrointestinal tract within 5 to 7 days, and four patients underwent surgery due to complications (3 due to TEF, and one due to intestinal perforation). There was no mortality in our study.

**Conclusion:** Most cases of disc battery ingestion run uneventful courses, but some may be complicated .If the battery impacts in the esophagus, emergency endoscopic management is necessary, but once in the stomach, it will usually pass through the gastrointestinal tract.

#### فیستول تراکئوازوفاژیال به دنبال بلع باتری دیسک و جسم خارجی

دکتر احمد خالق نژاد طبری، دکتر علیرضا میرشمیرانی، دکتر محسن روزرخ، دکتر جواد سیدی، دکتر نسیبه خالق نژاد طبری، دکترسجاد رضوی، مهشید طالبیان

## Tracheoesophageal fistula following disc battery ingestion and foreign body impaction

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**Background:** Ingestion of foreign bodies may result in formatting a tracheoesophageal fistula (TEF), which causes severe morbidity in children. We describe four cases of TEF, who underwent emergent surgery for repair. **Cases presentation:** In this report we discuss about four patients aged between 9 months to 2.5 years, who referred due to disc battery ingestion. There were two boys and two girls, and the common symptoms were cough, cyanosis, and dysphagia, choking and vomiting. Diagnosis was performed by X ray, barium swallow and CT scan. All batteries were impacted in the esophagus, two in upper, one in middle, and two in lower esophagus position. All disc batteries were removed endoscopically, but had tracheoesophageal fistula (TEF). All patients underwent TEF repaired surgically. There were no morbidity in four patients, but one patient developed moderate esophageal stenosis, which was repaired by staged dilatation. There was no mortality in our cases.

**Conclusion:** Long-term impaction of foreign bodies may result in tracheoesophageal fistula. This complication may be seen earlier with alkaline disc batteries. Removal of these foreign bodies should be followed carefully for the diagnosis and treatment of these fistulas.

# آسپیراسیون جسم خارجی در کودکان در بیمارستان قدس دانشگاه علوم پزشکی قزوین دکتر سعید طرلان، فاطمه خلیلی، فاطمه تیموری

#### Foreign Body Aspiration in children

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**Background:** The aspiration of foreign body (FB) especially by small children life threatening situation and can be fatal. The aim of this survey was to study the types of foreign bodies in the upper airways and digestive tract, prognosis and outcomes on the basis of hospital records of the Qods Children Hospital in Oazvin from 1384-1389.

**Methods:** We performed a retrospective review of hospital records using standardize Protocol. Foreign body aspiration that occurred in children ages 0-15y were considered for inclusion in the database .During the study period, 133 patients with a diagnosis of FB were included in the database 87(%65/4)of patients were male and 46(%34/6)were female,20pationts had not FB in the respiratory tract.

**Results:** %31/8 of all cases, the children were under the age of 2y, 77 of the 113 patients had a foreign body in the trachea /bronchial trees. The foreign body bodies (FB) were always extracted by using an endoscopic procedure. Moreover, hospitalization was always required due to an institutional requirement. The most commonly found foreign bodies were seeds, nuts, coins, berries and grains.

**Conclusion:** Most of foreign bodies were found in the trachea, bronchial trees. The extraction method is rigid bronchoscopes or gastrointestinal endoscopy, a procedure requiring anesthesia. The fact that a large fraction of the injuring occur under the supervision of the adults suggest that the number and severity of the injuries could reduced by educating parents and children .prognosis and outcome depended to the location of foreign body ,time lag to diagnosis and personal experience.

### مطالعه علل تشخیص دیررس در آسپیراسیون جسم خارجی دکتر سعید اصلان آبادی، دکتر داوود باد برین، دکتر شهین عبدالهی فخیم

#### Study of the Causes of Delayed Diagnosis in Patients with Foreign Body Aspiration

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**Introduction & Aims:** Foreign body aspiration commonly involves very young children and taking a precise history and doing a careful physical examination can lead to diagnosis. If the extraction of the object is delayed beyond 24 hours, it will lead to complications such as pneumonia, abscess, and atelectasis. Therefore, the present study tries to investigate the duration and reasons of delayed diagnosis of airway foreign body aspiration in children admitted to pediatric Hospital in Tabriz.

**Method:** This cross-sectional descriptive study was done over a period of 36 months, from 2007 to 2010, in the ENT Department of Children's Hospital in Tabriz. 155 cases that had been admitted for foreign body aspiration and had undergone successful bronchoscopic removal were studied. The information such as the history of choking, the gap between initiation of symptoms and admission (duration of delayed diagnosis), outpatient visits, the first diagnosis, and the results of bronchoscopy was all recorded in the checklists. To analyze the data, descriptive statistics, and SPSS 11.0 were used.

**Results:** The mean age of the patients was  $21.58 \pm 12.90$ ) months. 81.3% were under 3 years of age and 18.7% were above 3. Protracted cough lasting beyond 3 weeks was the most common symptom found in 73.5% of the cases. The average interval between aspiration and admission was  $24.71 \pm 8.96$ ) days. Only 24.5% arrived in the first 24 hours. The main causes of delayed diagnosis were lack of notice on the part of parents and incorrect diagnoses made by physicians.

**Conclusion:** 75.5% of the cases with foreign body aspiration were referred after 24 hours and the duration of delayed diagnosis in the present study was longer than that mentioned in the reports of other centers. Parents' unawareness and physicians' insufficient training can delay the diagnosis of airway foreign body aspiration and cause serious complications. Thus, providing proper education is necessary to prevent them.

# یک مورد لوبکتومی لوب تحتانی ریه بعلت بلع جسم خارجی در یک دختر بچه ۲ ساله دکتر بهار اشجعی

## A case report of pulmonary left lower lobectomy because of foreign body aspiration in 2 years old girl

#### Ashjaei B

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**Back ground:** Foreign Body Aspiration is the cause of death in many children younger than five years. 60% of deaths due to foreign are in infants.

Parts of some foods especially peanuts and hotdogs are the most common things which aspirated by toddlers. The small parts of toys are the most Aspiration materials after foods.

Case Report: A 2 years old girl was referred to our hospital who was suffering from cough from 12 days ago. This child had an episode of chocking in 12 days ago. In CXR we found a 1 inch nail in left thoracic cavity near the heart. The child prepared for bronchoscopy. In bronchoscopy we found that nail in the bronchus of left lower lobe. We tried to pull out the nail by crocodile forceps. But we couldn't because of adhesion to adjacent organs and the angel of foreign body. Even with the aid of fluoroscopy we couldn't extract the nail. After trying by bronchoscopy and failures of extracting the foreign body we prepared the patient for thoracotomy and excision of it. In thoracotomy we found that the nail. Was eroded from bronchus to adjacent organs Because of sever inflammation around the bronchus we couldn't extract the foreign body without ligation of vessels. Therefore the excision of foreign body was done by ligation of artery and vein of left lower lobe and left lower lobectomy was done. After that, repair of pericard was done and a chest tube was located to left thoracic cavity.

**Conclusion:** Almost all of foreign bodies can be extracted by rigid bronchoscopy and need for surgery is a very rare event but if is needed we must not hesitate from that. Because the most of the complications are resultant from delay in performing the procedure.

### بررسی سه ساله و تنوع ترومای کودکان در استان خراسان رضوی دکتر مرجان جودی، دکتر مهران هیرادفر، دکتر رضا شجاعیان، پریسا فرجی

## Demographic pattern of Pediatric trauma in Mashhad: Report of 1000 cases of trauma in pediatric who admitted in Shahid Kamyab Hospital

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**Back-ground**: Trauma is the leading cause of mortality and morbidity in children from ages 1 to 14 years. It results in more death and disability than all other childhood diseases combined.

Pediatric trauma remains a major public health problem in all developed and developing countries around the worlds.

**AIM**: It seems that up to yet we don't have an exact data and scientific look about the pediatric trauma in Iran. We aim to present an accurate data about the pattern of trauma in Mashhad city in this article.

**Paitients and methods:** Masshad is the second biggest city of Iran after the capital. As the holy shrine of Imam Reza the 8<sup>th</sup> shiiee Imam is located in this city, Mashhad is one of the most interested tourism destinations causing a heavy traffic to and from the city. Car accident and trauma is one of the main problems of health services in this city due to this crowdedness.

Shahid kamyab Hospital is one of the three centers of trauma in mashhad that admitted near to 1000 cases of pediatric trauma each year.

**Results:** Upper and lower extremity were the most common type of trauma followed by CNS and abdominal trauma.

**Conclusion:** It seems that due to frequency of orthopedic and neurosurgical problem of pediatrics traumatology, we need a team specialized in different fields of pediatric trauma.

In this article we present the demographic pattern of trauma about the 1000 Cases of pediatric, who were admitted in this hospital during the last year.

#### House hold washing, acid and alkali poisoning in children

#### Koushanfar A

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Aim: This retrospective study collected clinical and paraclinical of children poisoning in Loghman hospital medical center.

Result: A total number 3895 patients were admitted and investigated. 3790 out patients (97.3%) low toxicity patient for 4 - 6 hours and moderate toxicity 24 - 28 hours were admitted and treated by vomiting by ipeka syrup and gastric lavage as out patients and high toxicity 105 patients (2.7%) hospitalized four patients died 60 percent were boys. The age peak 2-3 (25%) under 6 years (56%) and 216 products poisoning accrued.

Hydrocarbon was the most common cause of poisoning in 908 patients, whitening in 328, unknown drugs in 241, food poisoning in 212 accordingly and the remaining patients poisoned with other available drugs.

In a research 501 cases of house hold washing 348 whitening and acid alkali, 80 cases washing hand product, 51 cases infections solution, 22 cases, cosmetic and most cases accidental and dangerous poisoning was alkali, acid and severe hydrocarbon poisoning.

Conclusion: High incidence of children poisoning should noted and all age group of children are victims and unintentional poisoning are preventable and must be considered as priority of prophylactic healthcare in Iran and all countries.

دكتر صلاح الدين دلشاد، دكتر پيروز فرهود، دكتر سيد جواد نصيري

## Esophageal replacement in children: presentation of 18 cases and results of their surgical procedure

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**Background:** Esophageal replacement is indicated in certain circumstances including long gap esophageal atresia, severe strictures due to gastro – esophageal reflux (GER) and caustic burns. We analyzed our results of 18 patients who underwent esophageal replacement in our university hospital.

**Methods:** we reviewed esophageal replacements carried out in our department between June 1996 and August 2004. We report 18 patients (4 girls and 14 boys) with ages ranging from 3.5 until 30 months. Fifteen patients had long gap atresia, two had strictures due to GER, and one case had caustic burn. Esophageal replacement was performed through an abdominal midline incision by one of three methods, namely: colon transposition in 15, gastric replacement in 2, and gastric tube in 1 case.

**Result:** leakage and stricture were the most common complications of esophageal replacement. Most deaths were due to aspiration pneumonia and congenital cardiac disease.

**Conclusion:** Esophageal replacement has limited indications. It allows a good functional result, with adequate oral feeding and normal growth.

#### جایگزینی مری با روش گاستریک تیوب

دكتر احمد خالق نژاد طبري، دكتر محسن روزرخ، دكتر نسيبه خالق نژاد طبري

#### Gastric Tube Interposition for Esophageal Replacement in Children

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**Aim:** Esophageal replacement has been achieved using stomach, gastric tube, small intestine and colon in various positions and in single and multiple stages. The aim of this study is to present the results of gastric tube interposition in children with congenital esophageal anomalies and severe acquired esophageal stricture.

**Method:** This series describes 18 patients who underwent gastric tube interposition procedures for esophageal replacement at Mofid Children Hospital Tehran, Iran between 1996 and 2006. Clinical data including the indication for esophageal replacement, technique and timing of repair, early and late complications, and long-term follow-up were retrospectively gathered from patients' medical records.

**Results:** Patients consisted of 14 Male and 4 female, aged 8 months to 14 years (mean 47.8 months). Sixteen patients had normal oral feeding and proper weight gain. The mean time of follow up was 5.25 years (9 months to 10 years). One child developed failure to thrive without any difficulty in swallowing and is on supplementary feeding by gastrostomy.

There were 3 strictures. one in the neck anastomosis which was treat by dilatation and revision of anastomosis, one in the hiatal level which was because of tight hiatus and was treated by widening of hiatus. The last patient had a stricture at mid-portion of gastric tube, and was treated by dilatation, which resulted in perforation and was treated by stricturoplasty. Three leaks occurred at the neck anastomosis, two healed spontaneously and one resulted in intrathoracic leak and mediastinitis that led to death after 3 months. Another child with lymphocyte adhesion deficiency died due to infected neck wound and severe bleeding from carotid artery 22 days postoperatively.

**Conclusion:** Gastric tube replacement in posterior mediastinum is an ideal replacement because of adequate length which makes it easily reachable to pharynx, good blood supplies, straight and proper size, and early and easily correctable complications.

#### Ingestion of 1/5 kg magnet by a 7 year old boy

#### Ashjaei B

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Foreign body ingestion is more common in toddlers. Cons, meats and vegetable matters are common foreign body ingested in pediatric age groups. The most location for F.B entrapments in GI Tract is Esophagus.

(Cricopharyngeous, Aorta/left main stem bronchus. Gastro Esophageal junction).

**Case Report:** A 7 year old boy was referred to our hospital who was suffering from stomach-ache. He had a LUQ-Tenderness in physical examination and we found a huge radio opaque foreign body in his stomach. Therefore he was prepared for Laparotomy. We found 127 pieces of Magnets in his stomach that they were absorbed to each others, by positive & negative poles.

The boy swallowed these parts of magnet because of a voice that said to him and ordered to do that, after psychological consult, we found he was a case of early onset schizophrenia.

**Conclusion:** However foreign body ingestion is more common in toddlers but we can find it in any age especially in children. But when the size of foreign body or the cause or method of ingestion is unusual we must search for underlying cause for Example child abuse or psychological disorders.

# بررسی سطح اضطراب در مادران کودکان جراحی شده بستری در بیمارستان کودکان تبریز در سال ۸۹–۱۳۸۸

دكتر سعيد اصلان آبادي، مائده عليزاده، زينب فدايي، فاطمه عبدالخاني

## Anxiety levels in mothers of children hospitalized for surgery in children's hospital in Tabriz 1388-1389

Aslan Abadi S, Alizadeh M, fadaiy Z, abdolkhany F

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**Background:** illness and hospitalized was a stressful situation for the patient and his family and the real threat to potentially occur. When children are hospitalized, it is possible their mothers feel fear, guilt, guilt and anxiety to experience. Children in Hospital Care by Mothers are crying less. Anxious mothers, enlarge problems and are angry, finally their anxiety transferred to their child. In contrast mothers are less anxious; more satisfied with their care for their children and are more useful.

**Methods:** This study was cross-sectional study; mother's anxiety was evaluated by the spill Burger questionnaire. Anxiety of 80 mothers of children, who hospitalized for surgery in surgery department of children's hospital in Tabriz, was assess. Data was analyzed by using statistical software SPSS (Ver.13). Scores were ranked at three levels: Light (20-400) mild (41-60) and severe (61-80 **Results:** the results show that 53/1 % t of mother age was 35-26 years with mean age 29/1. Education level 36/7% of secondary school. Most mothers (41/2%) have a severe obvious anxiety (61-80). But the hidden anxiety of most Mothers (47/5 %) was in light level (20-4). There is no significant relationship between education and anxiety.

**Conclusion:** Hospitalization of children in hospital was stressful experience. Nurses as the first team of health must be assess the needs of mothers and children and to support them. Considering the Severe anxiety Mothers, and reward the vital role of mothers involved in child care, nursing must support the child's hospitalization is considered important.

# بررسی رابطه بین سطح اضطراب وعوامل ایجادکننده آن در مادران کودکان بستری در بیمارستان کودکان تبریز در سال های ۱۳۸۹–۱۳۸۸

مائده علیزاده، دکترسعید اصلان آبادی، پریسا شاکر، زینب فدایی

## Relationship between factors causing the anxiety levels in mothers of children hospitalized in Tabriz Children's Hospital. 1388-1389

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**Background:** Parents due to lack of knowledge about the cause and how procedures performed in hospital, due to the economic consequences of hospital costs, length of illness in their child's suffering or likely to spread disease to other children and families lack the necessary skills to care for child patients with fear and Are anxious. Anxiety experienced by parents of hospitalized children can be related to factors such as changes in parenting roles, insufficient information about prognosis and treatment of children, unfamiliar hospital environment, feeling guilt and sin, Sleep disturbance, fear of suffering children.

**Methods:** This study was cross-sectional study, mother's anxiety factors causing anxiety was evaluated by the spill Burger questionnaire and the researcher made questionnaire about the factors causing anxiety. 80 mothers of children, who hospitalized for surgery in surgery department of children's hospital in Tabriz, was assess. Data was analyzed by using statistical software SPSS (Ver.13). Rate each statement causes anxiety is computed separately.

**Results70/%** of mothers were told "My responsibility with the ill child is too much "90/8% From that, my child have pain, be very scared" and 47/3 % of the Mothers expressed "with the ill child, to some extent are dependent on others"

**Conclusion:** This study shows that there is no significant relationship between mothers' demographic profile, and the anxiety level. However, insomnia and increased responsibilities between levels of anxiety there was a significant relationship. So it seems to stay for a child, in addition to nursing support, family support should be to create peace in the mother and child comes to action. Finally, it requires continuous nursing education.