dell children's
medical center of central texas
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THE LINK Letter

News You Can **Use** from Dell Children's Medical Center of Central Texas

Summer 2009 Issue 3 Volume 2

WELCOME to our Summer 2009 Edition of the LINK Letter. This is a packed issue with a good mix of timely updates and reviews. We have a journal-quality report on murine typhus that is relevant to Austin, an update on the pediatric obesity program, a plea to shift the focus away from Baron von Munchausen and our first PCRS puzzler – you get to make the diagnosis.

PCRS continues to grow and we have added two new faculty this July, Lynn Campbell and Lynn Thoreson. Their pictures and bios will soon be up on our website. At the same time, however, we will be losing David Dubose to a sleep medicine fellowship. He will spend a year in Kentucky completing his fellowship and then plans on returning to this area to practice.

On the communication front, we are always open to suggestions and are currently piloting a new fax notification system that will notify your office that a patient has been admitted. Everyone has different communication needs and we are hoping that this extra piece of information will help facilitate timely discussion of your patients' needs. Please give us feedback on what works best for you.

On a final note, please remember to forward this newsletter to your friends and send me email addresses of pediatric providers in the Central Texas area that would benefit from this information.

Mark Shen, M.D.
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PCRS Puzzler: An Infant with Tachypnea and Retractions

Jennifer Lai, MD

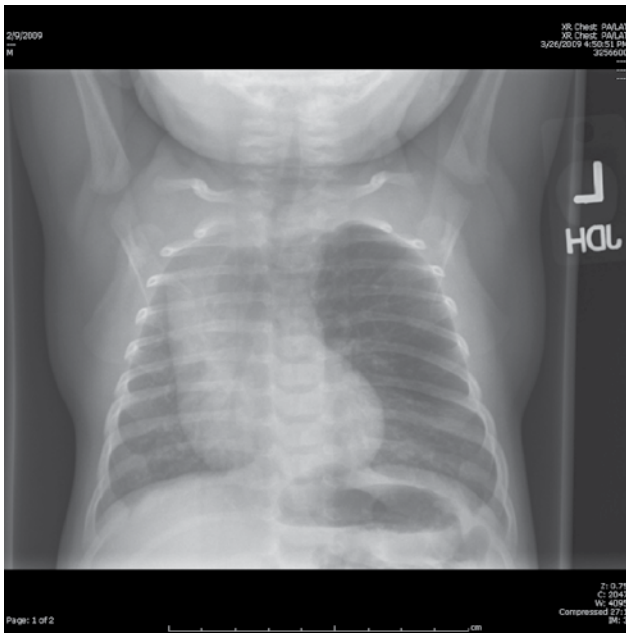
A six week old 38wk twin A baby boy was seen in the gastroenterologist office for constipation and noted to have tachypnea and retractions so was sent to the ER for further workup.

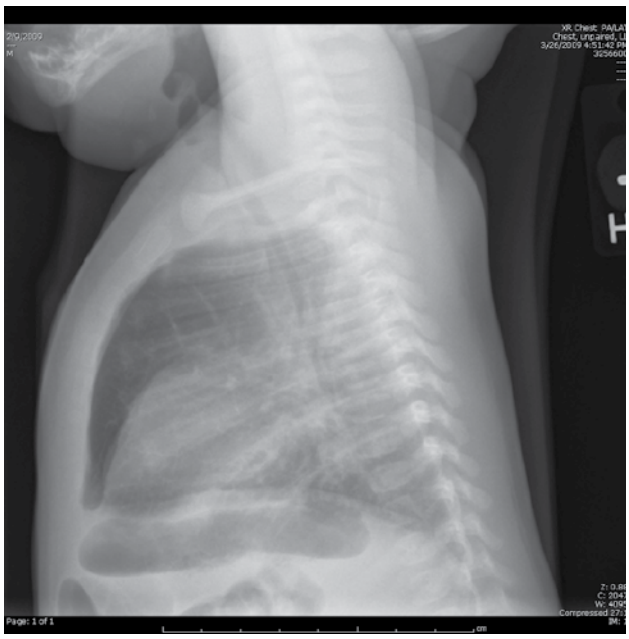
Further history reveals a 2 week history of tachypnea and 1.5 week history of subcostal retractions. He is gaining weight and eating, though not as vigorously as his twin brother. His prenatal and postnatal courses were unremarkable.

On physical exam his RR ranges from 30-60 breaths per minute and he is saturating well on room air. He has subcostal retractions that come and go. His chest exam is significant for medially displaced heart sounds, a 2/6 SEM that radiates from front to back, and distant breath sounds noted in the left upper lobe. There is good air entry bilaterally, symmetric chest wall movement, and all other lung fields are clear to auscultation.

In the ER, the following CXR is obtained. What is this child's diagnosis?

Answer on Page 4





Update on the Childhood Obesity Program

Dear Colleagues,

Central Texas has been afflicted by the pediatric obesity epidemic, but I'm sure you're already well aware. In Austin ISD alone, approximately 35% of the students in grades 3-12 are now overweight or obese, per this year's Fitnessgram® results[1]. Through a partnership with AISD, Dell Children's and the Seton Family of Hospitals share a unique relationship with AISD in that Dell Children's provides all of the Student Health Services staff for Austin ISD schools. Through this relationship we are working to be proactive by enhancing school-based health programs to positively impact this epidemic. During the next school year we plan to implement an enhanced level of school-based support for overweight and obese children at Austin ISD schools. These programs will be phased in and will include increasing levels of identification, education, support, and coordination with each student's medical home, with increasing levels of intervention depending upon the child's BMI percentile category: ≥85th-95th%ile, ≥95th-99th%ile and ≥99th%ile. The presence of significant obesity related co-morbidities will also result in enhanced school-based support and coordination.

Dell Children's Medical Center is also working to develop interdisciplinary pediatric obesity programs based at Dell Children's Medical Center. We are working to establish an interdisciplinary pediatric obesity center, with its first core program comprising a tertiary pediatric obesity clinic. Our goal will be for the *Texas Center for the Prevention and Treatment of Childhood Obesity* to include the following components: C • L • E • A • R; 1) evidence based multidisciplinary *Clinical* treatment; 2) *Legislative* advocacy, through serving as a resource and partner for health-related collaborative community efforts; 3) patient, community, and student/trainee *Education*; 4) community *Advocacy* and capacity building; and 5) novel *Research* to advance knowledge, document success and expand services.

We received a grant from the Austin Community Foundation and the Children's Medical Center Foundation to develop and implement Healthy Living, Happy Living / Vida Sana, Vida Feliz, an after-school, family-based obesity intervention. Our program includes the four key components of successful obesity interventions: physical activity, nutrition, mental health/behavior change, and family involvement. Our current program targets overweight and obese children aged 6-11 years and their parent or guardian. The program runs approximately 2 1/2 hours, once a week, for 10 weeks and progressively integrates and builds upon healthy living themes over the 10 week program. Since our first cohort in January, more than 60 children and their parents/guardians have completed the 10 week program. We have offered the program in English and in Spanish and preliminary results are very promising including the majority of child participants maintaining or lowering their BMIs. We will be offering one program in English over the summer and plan to have additional programs in the fall. Texas Pediatric Society Obesity Committee Chair and Austin Regional Clinic pediatrician Dr. Kim Avila Edwards and UT-Austin and Texas Child Study Center Child Psychologist Dr. Jane Gray are also helping to direct the program and design the future obesity center. Our healthy living intervention was fortunate to be featured on the cover of the March 2009 edition of Texas Medicine, as Dr. Kim Avila Edwards was highlighted in the edition discussing obesity in Texas, and multiple photos from our program were included. Dr. Avila Edwards was also the editor of the Texas Pediatric Society Obesity Toolkit and the 2nd Edition, and its many downloadable resources, is now available online at: http://www.txpeds.org/Obesity_Toolkit/

We are optimistic about the future for the childhood obesity programs at Dell Children's Medical Center and AISD and look forward to working with you to play our part in reversing the childhood obesity epidemic. We welcome and look forward to hearing any suggestions that you may have regarding the development and focus of these programs.

Sincerely,

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1. Passed in 2007, Senate Bill 530 requires a fitness assessment for all students in grades 3-12. The Texas Education Agency selected the Fitnessgram® as the assessment tool to be used by all districts throughout the state. The Fitnessgram® was developed by the Cooper Institute in Dallas and includes measurements of cardiovascular fitness, muscle strength, muscular endurance, flexibility, and body composition.

Lessons in Family-Centered Care

Michelle Mirsky

As my son Lev's second birthday approaches, I find myself contemplating the events and experiences of Lev's medical care these last two years and looking for meaning in the steep learning curve they've represented to me and to my family. When Lev was diagnosed with Transposition of the Great Arteries at my routine 20 week ultrasound, it's fair to say we knew nothing about anything medically complex. All of our prior experiences in the healthcare system had been relatively minor when compared to the journey on which we were about to embark. Lev's in-utero diagnosis was curveball number one, but it would be by no means the last curveball. His expected 10 day to 3 week recovery time stretched into a 4 month PICU stay with 2 additional heart procedures and multiple non-cardiac surgeries including placement of a G-button, all of which provided major crossroads for Lev and for our family. With all of the learning we've done – and continue to do, I find no lesson has been more important than our understanding of Family-Centered Care. Without the constant, seamless bedside education we've received in Family-Centered Care and the resultant partnership we feel with Lev's healthcare team, I truly believe Lev might not be with us today.

Though there may have been earlier lessons, it was a while before I started becoming conscious that I was learning. But as I began to really pay attention to everything happening around Lev, I realized that education was everywhere I turned, and our family was the center of Lev's care. For the PICU nurses, the practice of caring for my critically ill child involved constant narration. Narration about which medication was being administered and why, about what the beeps and noises on my son's countless monitors and machines meant, about how I could still mother my critically ill newborn. And then there were the questions - questions about our understanding of what the nurses, respiratory therapists, nurse practitioners, clinical assistants, doctors and many others were doing as they came in and out of the room; questions about what we might need for ourselves, for our other child, for family members in order to help process the sheer overwhelming-ness of the medical world in which we now lived. And possibly most importantly, questions about how I perceived Lev to be feeling – if I thought he was in pain, if I thought he seemed better/worse/the same. All of this was training us to be part of Lev's medical team. And it was seamless.

As the Lev's condition progressed, we continued to learn from the nurses, from the physicians, from the therapists, the social worker, the child life specialists. For the most part, the predominance of the physicians and staff that cared for our son made us aware of the opportunities for us to partner with the healthcare team in care & decision-making during Lev's hospital stay and encouraged us to take advantage of these opportunities. This constant education and assessment led us to trust Lev's medical team implicitly.

That's not to say things always went smoothly. After several weeks in the hospital, Lev needed a second open heart surgery to correct a residual defect thought to have been fully repaired during his first major heart procedure. This was, understandably, a difficult time for our family. But as we sat with Lev's team and with his surgeon and discussed the past, present and future of Lev's heart, never did we feel anger or blame. We felt that the transparency of the experiences that had led to this point was so tangible, that we were ready to move forward as a team to continue Lev's treatment. The respect that was continually shown our family, the constant flow of information, the participation we were able to share in decision making around Lev's early care allowed us to trust that moving forward was the only direction in which to move. And so, with a lot of hand-holding and education, we proceeded with the next heart surgery. Lev came through with flying colors.

As I look at all that Lev's achieved, all that he's made it through, and all that he's still got ahead, I am eternally grateful for those early days of education that allows my family to be confident partners in his ongoing care. There are undoubtedly many curveballs yet to come; that we are a part of Lev's care team makes them easier to field.

Editor's Note: Michelle Mirsky is the DCMC Family Liaison and a member of the Family-Centered Care Steering Committee and Leadership Team. Her voice as a parent has been invaluable as we progress on our journey towards Family-Centered Care at DCMC. Expect more updates in our upcoming LINK Letters. Related reading: http://www.the-hospitalist.org/details/article/238827/Family_Comes_First_.html. mws

Pediatric Alliance Update

Mission Statement
The Pediatric Physician Alliance of Central Texas is a civic and professional organization of pediatricians and pediatric sub-specialists who have joined together in pursuit of optimal care for the children of Central Texas. By forming an alliance, area pediatricians are prepared to build consensus on issues relating to medical practice, standards of care, minimizing barriers to access of children's health care, managed care, and pediatric subspecialists. By facilitating the collegial association of pediatric physicians, the Pediatric Physician Alliance is well positioned to develop and achieve effective recommendations for change. Enhancing the delivery and quality of healthcare for children by advocating pediatric specific community resources, education, and state of the art technologies is our mission. Nonfragmentation of pediatric care is our unifying goal.

Editor's Note: The Alliance is in the midst of a renewed effort to keep you, the pediatric community of Austin, up-to-date with its efforts. Your participation is vital to its continued success and sustainable initiatives. Expect information in the upcoming months regarding membership information and events. mws

Continued from Page 1

DIAGNOSIS: Congenital Lobar Emphysema.

This child's CXR reveals extreme hyperinflation of the left upper lobe with mediastinal shift of the airway and heart to the right. On lateral view, the left lung is seen anterior to the heart.

He is admitted from the ER in stable condition, placed with his left side down. A CT scan of the chest confirms the diagnosis and also notes that the L pulmonary artery is mildly compressing the left mainstem bronchus. Also noted is compressive atelectasis of the right upper and lower lobes.

Congenital lobar emphysema (CLE) was first described in 1932 and is characterized by overdistension and air trapping in the affected lobe. Subsequently it causes mediastinal shift away from the affected lobe and contralateral compressive atelectasis. It is a rare cause of infantile respiratory distress. Presentations vary based the degree of emphysema.

In general, CLE is caused by a valve type mechanism at the bronchial level by which much more air enters the segment on inspiration than is allowed to exit on expiration. The most commonly found cause is congenital deficiency of bronchial cartilage in which an abnormal floppy wall collapses on expiration. Dysplastic cartilage, bronchostenosis, or extrinsic compression of the cartilage are other described causes.

CLE tends to most commonly affect the left upper lobe, then either the right middle or right lower lobe. There are cases of multiple lobes affected as well.

In 10-14% of the cases there are associated cardiac anomalies. Other associated congenital anomalies sporadically reported include: diaphragmatic hernia, hiatal hernia, cleft palate, oomphalocele, absent kidney, extrpulmonary cartilage defects, accessory digits, pyloric stenosis, and pectus excavatum. Our patient's murmur was evaluated and he had physiologic branch pulmonary artery stenosis in addition to a small fenestrated ASD with left to right shunt.

Fifty percent of children present with symptoms in the 1st days of life through the first month. The rest are typically diagnosed by 6 months of age though rarely it can be diagnosed in an asymptomatic older child.

Symptoms include tachypnea, retractions, cough, cyanosis, wheezing, or hoarseness. Physical exam shows decreased breath sounds and hyperresonance over the affected lobe. Also asymmetric chest wall movement can be noted in which there is very little chest wall excursion on the affected side. Hypoxia or hypercarbia can be seen in severe cases.

On chest radiograph you typically see what this patient had: extreme hyperinflation of the affected segment, heart and mediastinal shift to the opposite side, and contralateral atelectasis. On lateral projection the heart can be medially displaced with the sternum bowed forward. If the infant is presenting close to birth, often the affected lobe is often radioopaque secondary to retained lung fluid or there is a reticular pattern from lymphatic channels distended with the retained lung fluid. Later on the emphysema develops.

In the past, CLE was considered solely a surgical disease. The thought was the emphysematous segment needed removal to allow for improved pulmonary function of the compressed lobe, and to allow for growth of new functional lung tissue. Studies over time have shown that CLE can be safely managed medically in the milder cases. Furthermore a study has shown that there is no new growth of functional lung after resection.

Because our patient was young when he presented, had an extreme degree of hyperinflation, and had effect on his feeding, he proceeded to flexible bronchoscopy then a left upper lobectomy with chest tube placement. His operative specimen did not reveal any bronchial pathology. He did well postoperatively and was discharged home on postoperative day 4.

In summary, congenital lobar emphysema is an uncommon cause of infantile respiratory distress. It has fairly classic imaging findings, and clinical severity determines surgical intervention, or conservative medical management.

References:

1.Stigers KB, Woodring, JH, Kanga, JF. The Clinical and Imaging Spectrum of Finding in Patients with Congenital Lobar Emphysema. Pediatric Pulmonlogy 14:160-170 (1992)

2. Ozcelik U, Gocmen A, et al. Congenital Lobar Emphysema: Evaluation and Long-Term Follow-Up of Thirty Cases at a Single Center. Pediatric Pulmology. 35:384-391 (2003)

Insects and Summer Swelling: Is It Really Cellulitis?

Mark Shen, MD

A 6 year old comes in for limp associated with swelling and redness of his foot. He was playing soccer in a field yesterday without his shoes on and is unsure of whether or not he was bitten by an insect. The dorsum of his foot is swollen with some faint erythema and extension to the ankle. He has been scratching a small papule on the lateral edge of his foot. The foot is not tender to palpation and mobility appears appropriate, although he limps noticeably when asked to walk. The mother also reports that he felt warm last night. He is admitted for further evaluation of possible cellulitis, abscess and arthritis.

Insect bites and stings are often blamed as the inciting agents for a good number of cases of cellulitis by patients, parents and practitioners. Scratching leads to a break in the skin, allowing for bacterial entry and the eventual circumferential infectious inflammation which we are accustomed to seeing. However, redness and edema may be a manifestation of bites and stings alone. Large local reactions may progress rapidly and at times, may be mistaken for cellulitis, occasionally with subsequent hospitalization for IV antibiotics.

Within the Hymenoptera order, bees, yellow jackets, hornets and fire ants are the most likely group of insects to sting and cause subsequent reactions. Reactions may range from anaphylaxis to mild pain. Large local reactions typically involve edema, pruritis and erythema with a diameter of greater than 10 cm.1 This typically takes 1-2 days to be most pronounced and may take over a week to resolve. The underlying pathophysiology is not entirely clear but likely involves a combination of toxic, allergic (IgE) and hypersensitivity mechanisms.

How is a large local reaction differentiated from cellulitis? There are several features that should serve to distinguish these commonly confused inflammatory processes. Pruritis is a cardinal feature of allergic reactions in general, and although occasionally reported as a symptom of cellulitis, it should be much less prominent with infection. On the other hand, localized tenderness of the skin is almost always present in cellulitis and rarely an issue in large local reactions. Note that generalized pain and discomfort may always accompany the rapid onset of any inflammatory edema. Finally, induration of the skin should be prominent in cellulitis and spreads circumferentially from the initial break in skin, whereas in large local reactions induration is notably absent. Fever may be variably present in both, although persistence suggests a true infection. Labs may not be helpful; leukocytosis may be seen in both although eosinophilia suggests a primary allergic response. Ultimately, if the diagnosis is in question close observation without antibiotics may be the best course. Large local reactions will stabilize after the first 24-48 hours, without localized tenderness or induration. Generalized pain should become less prominent while pruritis and some degree of functional limitation (due to the swelling) may be the lone findings. In contradistinction, cellulitis should progress to clearly spreading induration with increasing worsening local, and possibly systemic, inflammation.

The future risk of systemic reactions is a concern and is estimated to range from 5 to 15%.2 Care should be taken in the initial history to ensure that non-contiguous urticaria, angioedema or cardiorespiratory compromise were not present. Management is primarily supportive and education regarding the typical course should help allay fears. Epinephrine and immunotherapy are not typically recommended and their use is controversial.3

1. Moffitt JE, Golden DB, Reisman RE, et al. Stinging insect hypersensitivity: a practice parameter update. The Journal of allergy and clinical immunology 2004;114(4):869-86.
2. Bilo BM, Rueff F, Mosbech H, Bonifazi F, Oude-Elberink JN. Diagnosis of Hymenoptera venom allergy. Allergy 2005;60(11):1339-49.
3. Severino M, Bonadonna P, Passalacqua G. Large local reactions from stinging insects: from epidemiology to management. Current opinion in allergy and clinical immunology 2009.

Prolonged Fever with Headache or Rash? Remember Murine Typhus.

Daniel E. Howard, MD, MPH I Marisol Fernandez, MD I Sarmistha B. Hauger, MD

In 2008, an outbreak of murine typhus occurred in Travis County, with 33 confirmed cases, including six children under 18. Prior to this, only two cases were reported in Travis County from 1988-2007. The infections have continued in 2009. As of June 25, at least two children from Travis County and two children from Williamson County have been infected. The reasons for this resurgence in murine typhus in central Texas are unclear. This article will review the epidemiology, clinical and laboratory characteristics, diagnosis, and treatment of children with murine typhus.

Epidemiology

Murine (endemic) typhus is an acute febrile illness caused by the small gram-negative, obligate intracellular bacterium *Rickettsia typhi*. This zoonotic infection was once common in the southeastern United States and California, and continues to affect many people in other parts of the world living in tropical and subtropical regions, especially those living in large coastal cities. In 1945, the US Public Health Service began an effort to eliminate urban rat populations and their accompanying fleas. This reduced the annual reported incidence of murine typhus in the United States from over 5000 cases per year to approximately 100 cases per year. Over the past three decades, infections have been clustered in Texas, and, to a lesser extent, California and Hawaii. Infections vary by season, and generally peak in May, June, and July. The vast majority of cases of murine typhus cases in Texas in the past thirty years have been located in the far southern portion of the state, in Cameron, Hidalgo, and Nueces counties, near the confluence of the Rio Grande and the Gulf of Mexico. Nevertheless, murine typhus is the most common rickettsial infection in Texas, and the second most frequent overall in the United States, next to Rocky Mountain Spotted Fever.

Clinical Features

Murine typhus is transmitted to humans from small mammals by fleas. Traditionally, infection has been associated with the rat flea (*Xenopsylla cheopis*), although the cat flea (*Ctenocephalides felis*) has been implicated in recent infections in the United States. Opossums, cats, dogs, and (to a lesser extent in Texas) rats serve as the natural reservoirs for infected fleas. Once the *Rickettsia typhi* bacteria enter the human bloodstream via the flea bite wound, they infect the endothelial cells of many tissues, causing a systemic vasculitis via local cellular destruction and recruitment of inflammatory cells. The vasculitis can manifest pathologically as mild hepatitis, meningoencephalitis, interstitial pneumonitis, myocarditis, and interstitial nephritis. Clinically, murine typhus infection is typically characterized by high spiking fevers, headache, malaise, myalgias, abdominal pain, poor appetite, nausea, vomiting, and diarrhea, followed four to seven days later by a macular or maculopapular rash. Fever with either headache or rash has been observed in 90% of affected children in Texas. Headache is sometimes severe enough to require lumbar puncture to rule out meningitis. Left untreated, infection lasts approximately two weeks. Murine typhus can lead to significant morbidity and even mortality, although severity of infection tends to increase with advancing age and presence of medical comorbidities.3 In studies of Texas children infected with murine typhus, over half of reported cases required hospitalization, with mean duration of hospitalization of six to seven days. Common laboratory features include elevated AST and ALT, leukopenia, thrombocytopenia, anemia, hyponatremia, hypoalbuminemia, elevated ESR and CRP, and elevated LDH. ,

Diagnosis

High clinical suspicion is necessary to make the diagnosis of murine typhus. Indeed, of the 97 Texas children with confirmed murine typhus from 1979 to 1996, only one third were initially diagnosed with this disease during their hospitalization or physician office visit. Children who received an initial diagnosis of murine typhus had a significantly shorter duration of illness, presumably due to earlier initiation of appropriate antibiotics.9 Symptoms of murine typhus are often nonspecific, with similarities to viral infections such as EBV and CMV, bacterial and viral meningitis, atypical infections such as systemic *Bartonella or Mycoplasma*, as well as other arthropod-borne infections such as Ehrlichiosis, Rocky Mountain Spotted Fever, Lyme Disease, and Dengue Fever. Diagnosis is confirmed by elevated serum levels of antibodies specific to *Rickettsia typhi*, usually as measured by indirect fluorescent antibody (IFA) testing (IgG and IgM). Because peak titers may not occur for several weeks after onset of illness,9 a fourfold rise in acute to convalescent antibody titers (taken at least two to three weeks apart) is considered diagnostic, as is a single elevated IgM titer (≥ 1:64) in endemic regions.

Treatment

As a result of the delay in confirmation of diagnosis, many people are treated presumptively, before an official diagnosis can be made. As in other rickettsial infections, doxycycline is the treatment of choice for murine typhus, although historically chloramphenicol has also been used. The usual dose for children is 2.2 mg/kg PO bid, or 100 mg PO bid for larger children and adults, with a maximum daily dose of 300 mg. Therapy should be continued for at least three days after defervescence and documented evidence of clinical improvement (usually 7-10 days total therapy).11 In previous studies of children, the median time to defervescence was approximately 36-48 hours after beginning doxycycline.8,9 The risk of dental staining in children under 8 is negligible for a single short course of doxycycline.

Recommendations

Murine typhus infection should now be considered in any child in central Texas with prolonged fever accompanied by rash or headache. Most children with murine typhus have some abdominal symptoms (vomiting, abdominal pain, or diarrhea), and many report myalgias, malaise, cough, and decreased appetite. Supporting laboratory evidence of infection includes hyponatremia, leukopenia, thrombocytopenia, anemia, elevated transaminases, and hypoalbuminemia.

'Specially For Children Pediatric Infectious Disease physicians are available to evaluate and treat children with suspected murine typhus. Severe infections often require hospitalization at Dell Children's Medical Center (DCMC). The SFC ID clinic is located in the Strictly Pediatrics building, next to DCMC and the phone number is (512) 628-1820. Inquiries from community providers are welcome.

For practitioners who choose to manage less severely affected children with suspected murine typhus, we recommend drawing acute titers to *Rickettsia typhi* (IgG and IgM, tested by IFA) during acute infection, and 2-3 weeks later, after recovery. Treatment with doxycycline should be initiated empirically, as outlined above.

Murine typhus is a reportable disease in the State of Texas, and must be reported to the local health department within one week of laboratory confirmation of infection. Reporting forms are available at: *http://www.dshs.state.tx.us/idcu/investigation/forms/epi2.pdf.* Completed forms should be faxed or mailed to the health department in the county of residence of the affected child. In Travis County, forms can be faxed to (512) 972-5772 (phone number is (512) 972-5555). In Williamson County, forms can be faxed to (512) 930-4017 (phone number is (512) 943-3660). Reporting contacts for other counties can be found at: *http://www.dshs.state.tx.us/idcu/investigation/conditions/contacts/*

The best way to prevent murine typhus is through good flea control of household pets. Patients can be referred to the following website from the Austin/Travis County Health and Human Services Department for further information about murine typhus, including specific steps to take to prevent infection: *http://www.ci.austin.tx.us/health/news_rickettsiae.htm*

Dan Howard recently completed his pediatrics residency at Dell Children's Medical Center as third year chief resident physician, and begins work as a general pediatrician at Austin Diagnostic Clinic in September, 2009. Marisol Fernandez and Sarmistha Hauger are Pediatric Infectious Disease specialists at Dell Children's Medical Center and 'Specially For Children Infectious Disease Clinic. All three physicians are currently conducting research on the outbreak of murine typhus in central Texas.

Medical Child Abuse: Returning the Focus to the Victim

George Edwards, MD

A recent case at Dell Children's Medical Center that involved a mother contaminating her child's central line with feces from the child's diaper and the front-page media coverage that ensued brought attention to the diagnosis of Munchausen's Syndrome by Proxy. It left many wondering what possibly can be the motivation of a perpetrator who constructs an elaborate premeditated web of deceit to harm a child. While no one has really been able to answer that question satisfactorily, a recently published book elucidates current thinking and evolving concepts on this diagnosis.

Dr. Roy Meadow in the U.K. first coined the term, *Munchausen's Syndrome by Proxy*. Munchausen had been a Bavarian Baron from the 19th century who had gained notoriety for telling wildly exaggerated tales. Asher had first used the term *Munchausen's syndrome* in 1951 when he described cases where patients lied about their symptoms to get admitted to the hospital. Subsequently in 1977 Meadow described two cases of induced illness in children. One was that of a toddler who died from salt poisoning. The other was that of a six year-old with a long history of repeated urinary tract infections and hematuria. Meadow had been able to deduce that the toddler died as a result of salt added to his diet by his mother. In the other case, using very careful detective work, he was able to document that the child's urine was bloody, if and only if the mother had access to the specimen. Borrowing from Asher, Meadow titled his paper about these cases "Munchausen's Syndrome by Proxy: The Hinterland of Child Abuse."

Earlier this year Roesler and Jenny published the book *Medical Child Abuse: Beyond Munchausen Syndrome by Proxy*. In it they argue that by calling this form of child abuse Munchausen's by Proxy, Meadow and others have focused excessively on the perpetrator and her/his motivation. The word "syndrome" implies a diagnosis. If Munchausen's Syndrome by Proxy is a diagnosis, then to whom is the diagnosis assigned? Dr. Meadow himself has written, "In the past I have resented being asked in court whether someone is 'suffering from Munchausen syndrome by proxy': it has seemed no more appropriate than being asked if a man who has buggered his stepson is 'suffering from sex abuse.'" Munchausen Syndrome by Proxy is a form of child abuse; the child is a victim who has been harmed. Roesler and Jenny offer that although the motivation of any perpetrator is important to consider, that consideration is secondary to meeting the needs of the child victim. Those needs are identification of the abuse, stopping the abuse, and preventing the child from further harm. They argue that using the label Munchausen's by Proxy deflects focus from the child victim to the motivation of the perpetrator. Their position is that the term medical child abuse is more appropriate than Munchausen's by Proxy, because it focuses on the harm to the child. The harm is child abuse where the caregiver, either by factitious description of symptoms or by induction of illness, has caused unnecessary medical tests or treatment. We are still left wondering about the motivation of the perpetrator, but questions about motivation of those who physically or sexually abuse children often remain unanswered as well.

Pedi Grand Rounds, DCMC

All lectures listed are held from 7:30 to 8:30 a.m. in the Sig Auditorium (within the Pat Hayes Conference Center) at Dell Children's

Friday, August 14, 2009
7:30-8:30 AM in Signe Auditorium
"New Advances in the Ketogenic Diet"
Dr. Angela Black
(Community Pediatrician, Seton Lockhart Pediatrics, Lockhart, TX)

Friday, August 21, 2009
7:30-8:30 AM in Signe Auditorium
"The Ethics of Pediatric Autopsy"
Dr. Ann Miller
(Director of Pastoral Care, Cook Children's Hospital)
Dr. Denis Benjamin
(Director of Pathology, Cook Children's Hospital)
Dr. Britt Nelson
(Director, Pediatric Intensive Care Unit, Cook Children's Hospital)

Friday, September 11, 2009
7:30-8:30 AM in Signe Auditorium
"Abusive Head Trauma: Current Concepts and Controversies"
Dr. George Edwards
(Pediatric Chairman, Residency Program Director, CATCH Director, Dell Children's Medical Center)

Friday September 18, 2009
7:30-8:30 AM in Signe Auditorium
Obesity Intervention Program at Dell Children's Medical Center
Dr. Stephen Pont
(Assistant Professor of Pediatrics, UTMB-Austin, UT-Austin, Dell Children's Medical Center)

Pedi Grand Rounds, SMCW

For our physician friends in northern Travis and Williamson counties, Pediatric Grand Rounds are also held at Seton Medical Center Williamson (SMCW) in Round Rock. Please mark your calendars with dates in 2009:

Wednesday, August 5, 2009
12:15 – 1:15 p.m.
*Learning Center, Room 3, First Floor
"Hospital Key Performance Indicators"
Sister Teresa George
(VP and COO of Dell Children's)

Wednesday, September 2, 2009
12:15 – 1:15 p.m.
*Learning Center, Room 3, First Floor
"Spasticity Management"
Dr. Patricia Aronin, Neurosurgery & Dr. Karen Richards, Neurology