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Introduction

Welcome to the Queensland Child Protection Newsletter. This newsletter is a joint initiative of the Child Protection and Forensic Medical Service of the Lady Cilento Children’s Hospital (LCCH) under Children’s Health Queensland and the Statewide Child Protection Clinical Partnership (SCPCP). This newsletter includes research updates and other relevant resources in support of best practice in Child Protection, and further serves a communication pathway for news and updates from the SCPCP.


Access to links
Hold down the Ctrl key and clink on the link to access full text journal articles and abstracts. For full text articles not available via CKN, hospital staff can request document delivery via their designated library service.

Contact
To ensure receipt of this newsletter or to unsubscribe, please contact Laura Koopmans, Project Officer, Child Protection and Forensic Medical Service, Lady Cilento Children’s Hospital, South Brisbane:
Laura.Koopmans@health.qld.gov.au
☎️ (07) 3068 2660
Research Update

Abusive Head Trauma

1. Update on abusive head trauma


PURPOSES: This article provides an update on abusive head trauma (AHT), focusing on new developments most salient to the emergency medicine clinician, including epidemiology, clinical recognition, diagnostic work-up, management of neurologic injury, and public health implications.

RECENT FINDINGS: The recent literature has focused on honing the clinician's ability to recognize AHT and its immediate sequelae, to more accurately distinguish between abusive and accidental head injuries by patterns of neuroimaging and retinal hemorrhages, and to appreciate the long-term impacts. Specifically, both a clinical prediction rule and biomarker show promise, and new research advocates for the early identification of subclinical seizures as well as cervical spine injuries.

SUMMARY: The emergency medicine provider must be able to recognize and manage children who may have AHT and to appreciate when the diagnostic findings warrant consultation with a child protection team. These authors summarize the recent and notable advances in our understanding of AHT.


2. Imaging of abusive trauma

Shekdar, K. Indian J Pediatr Ahead of print [Epub 17/02/2016].

ABSTRACT: "Shaken baby syndrome" is a term often used by the physicians and public to describe abusive trauma inflicted on infants and young children. Advances in the understanding of the mechanisms and the associated clinical spectrum of injury has lead us to modify our terminology and address it as "abusive trauma" (AT). Pediatric abusive head trauma is defined as an injury to the skull or intracranial contents of an infant or a young child (< 5 y age) due to inflicted blunt impact and/or violent shaking. This chapter focuses on the imaging aspects of childhood abusive trauma along with a brief description of the mechanism and pathophysiology of abusive injury. The diagnosis of AT is not always obvious, and abusive injuries in many infants may remain unrecognized. Pediatricians should be cognizant of AT since pediatricians play a crucial role in the diagnosis, management and prevention of AT.


3. Pediatric ophthalmologists' experiences with abusive head trauma


PURPOSE: To estimate the number of cases of abusive head trauma seen by pediatric ophthalmologists and analyze factors associated with physician subpoenas and court testimonies.

METHODS: Pediatric ophthalmologists were surveyed about their experiences with abusive head trauma. The survey was sent to 875 active members of the American Association for Pediatric Ophthalmology and Strabismus (AAPOS).
RESULTS: The response rate was 15% (132 surveys). The median pediatric ophthalmologist is consulted 10.0 (interquartile range [IQR] = 4.0 to 19.0) times per year to evaluate patients for abusive head trauma and sees 2.5 (IQR = 1.0 to 6.0) patients with probable abusive head trauma each year. Pediatric ophthalmologists were equally likely to be subpoenaed (4.6% vs 4.8%, P = .84) or to testify (1.9% vs 1.7%, P = .79) whether they did or did not perform retinal photography. Physicians were equally likely to be subpoenaed (4.8% vs 7.1%, P = .92) or to testify (2.2% vs 0.0%, P = .17) whether a child abuse team was involved in patient care or not. Geographic location had no statistical significance on how frequently pediatric ophthalmologists were subpoenaed (P = .17) or testified in court (P = .12). When a pediatric ophthalmologist was subpoenaed to court, the median number of missed clinic days was 1.0 (IQR = 1.0 to 2.0), with an estimated cost of $3,000 (IQR = $1,750 to $4,750) in lost revenue.

CONCLUSIONS: Obtaining retinal imaging, having a child abuse team, and geographic location had no significant relationship with how often pediatric ophthalmologists were subpoenaed or testified in court.


Physical Abuse

1. Quantitative MR imaging in fracture dating-Initial results


ABSTRACT: For exact age determinations of bone fractures in a forensic context (e.g. in cases of child abuse) improved knowledge of the time course of the healing process and use of non-invasive modern imaging technology is of high importance. To date, fracture dating is based on radiographic methods by determining the callus status and thereby relying on an expert's experience. As a novel approach, this study aims to investigate the applicability of magnetic resonance imaging (MRI) for bone fracture dating by systematically investigating time-resolved changes in quantitative MR characteristics after a fracture event. Prior to investigating fracture healing in children, adults were examined for this study in order to test the methodology for this application. Altogether, 31 MR examinations in 17 subjects (female symbol: 11 male symbol: 6; median age 34+/−15 y, scanned 1-5 times over a period of up to 200 days after the fracture event) were performed on a clinical 3T MR scanner (TimTrio, Siemens AG, Germany). All subjects were treated conservatively for a fracture in either a long bone or in the collar bone. Both, qualitative and quantitative MR measurements were performed in all subjects. MR sequences for a quantitative measurement of relaxation times T1 and T2 in the fracture gap and musculature were applied. Maps of quantitative MR parameters T1, T2, and magnetisation transfer ratio (MTR) were calculated and evaluated by investigating changes over time in the fractured area by defined ROIs. Additionally, muscle areas were examined as reference regions to validate this approach. Quantitative evaluation of 23 MR data sets (12 test subjects, female symbol: 7 male symbol: 5) showed an initial peak in T1 values in the fractured area (T1=1895+/−607ms), which decreased over time to a value of 1094+/−182ms (200 days after the fracture event). T2 values also peaked for early-stage fractures (T2=115+/−80ms) and decreased to 73+/−33ms within 21 days after the fracture event. After that time point, no significant changes could be detected for T2. MTR remained constant at 35.5+/−8.0% over time. The study shows that the quantitative assessment of T1 and T2 behaviour
over time in the fractured region enable the generation of a novel model allowing for an objective age determination of a fracture.

2. The etiology and significance of fractures in infants and young children: a critical multidisciplinary review


ABSTRACT: This paper addresses significant misconceptions regarding the etiology of fractures in infants and young children in cases of suspected child abuse. This consensus statement, supported by the Child Abuse Committee and endorsed by the Board of Directors of the Society for Pediatric Radiology, synthesizes the relevant scientific data distinguishing clinical, radiologic and laboratory findings of metabolic disease from findings in abusive injury. This paper discusses medically established epidemiology and etiologies of childhood fractures in infants and young children. The authors also review the body of evidence on the role of vitamin D in bone health and the relationship between vitamin D and fractures. Finally, the authors discuss how courts should properly assess, use, and limit medical evidence and medical opinion testimony in criminal and civil child abuse cases to accomplish optimal care and protection of the children in these cases.


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**Sexual Abuse**

1. Community characteristics associated with seeking medical evaluation for suspected child sexual abuse in greater Houston


ABSTRACT: Child sexual abuse (CSA) affects over 62,000 children annually in the United States. A primary obstacle to the success of a public health prevention strategy is the lack of knowledge around community level risk factors for CSA. We evaluated community level characteristics for children seeking care for suspected CSA in the Greater Houston area for 2009. There was a total incidence rate of medical evaluations for suspected CSA of 5.9/1000 children. We abstracted the medical charts of 1982 (86 %) children who sought a medical evaluation for suspected CSA at three main medical systems in the Greater Houston area for 2009. We evaluated 18 community level variables from the American Community Survey for the 396 zip codes these children lived in. The mean number of cases per Greater Houston zip code was 2.77 (range 0-27), with 62 % of zip codes not having a case at any of the three sites surveyed. Zip codes with a higher than Houston average rate of vacant houses, never married females and unemployed labor force with high family poverty rate, were associated with an increased rate of children seeking care for suspected CSA. We demonstrated zip codes level characteristics which were associated with an increased rate of children seeking care for suspected CSA. Our modelling process and our data have implications for community based strategies aimed at improved surveillance or prevention of CSA. The process of identifying locally specific community level factors suggests target areas which have particular socioeconomic characteristics which are associated with increased rate of seeking CSA evaluations.

2. Characteristics of sexual abuse among individuals with serious mental illnesses

Kmett, J. A. and S. M. Eack J Interpers Violence Ahead of print [Epub 08/02/2016].

ABSTRACT: The deleterious effects of sexual abuse (SA) are well documented, as many studies have found that SA can increase the risk for psychiatric disorders. While SA has been examined in multiple samples, no studies have examined the characteristics of SA in individuals with severe mental illnesses (SMI). This study examined the prevalence rate and characterized the nature of SA among individuals with SMI who were under psychiatric care in three different inpatient facilities. Utilizing data from the MacArthur Violence Risk Assessment Study, 1,136 individuals with SMI were assessed for SA histories, psychiatric diagnoses, and other demographics. Nearly half of this sample (n = 511) identified SA histories, with almost half indicating that the person was a stranger or someone outside of the family unit. One third reported SA occurred "too many times to count," and approximately a third indicated the abuse consisted of intercourse, occurring at a mean age of 11.22 years. Results found that individuals with SA histories were often never married, Caucasian, female, had children, described themselves as psychologically unwell, and were commonly voluntary psychiatric admissions. Those with SA histories had significantly higher psychopathology and lower functioning, and were more likely to be diagnosed with depression but less likely to be substance dependent. Identifying SA characteristics in individuals with SMI is a critical component to successful treatment. Thorough screening and assessment of this common problem can help clinicians identify accompanying issues that may exacerbate SMI symptomology, and improve the prognosis for long-term outcomes.


Emotional Abuse & Neglect

1. Subsequent maltreatment in children with disabilities after an unsubstantiated report for neglect


No abstract available.

Outcomes

1. Adversity, maltreatment and resilience in young children

Dubowitz, H., et al. Acad Pediatr Ahead of print [Epub 08/02/2016].

BACKGROUND: Much of the research on children in high risk environments, particularly those who have been maltreated, has focused on negative outcomes. Yet, much can be learned from some of these children who fare
relatively well. The objective was to examine resilience in high risk preschoolers, and to probe contributors to their adaptive functioning.

METHODS: The sample of 943 families was from the Longitudinal Studies on Child Abuse and Neglect (LONGSCAN), a consortium of 5 sites, prospectively examining the antecedents and outcomes of maltreatment. Most of the families were at high risk for maltreatment, and many had been reported to Child Protective Services by age 4. Standardized measures were used at ages 4 and 6 to assess the children's functioning in Behavioral, Social and Developmental domains, and parental depressive symptoms and demographic characteristics. Maltreatment was based on CPS reports. Logistic regressions were conducted to predict resilience, defined as competencies in all three domains, over time.

RESULTS: Forty-eight percent of the sample appeared resilient. This was associated with no history of maltreatment (OR=1.50, 95%CI=1.02-2.20, P=.04)), a primary caregiver reporting few depressive symptoms (OR=2.19, 95%CI=1.63-2.94, P<.001), was employed (P = .014), and fewer children in the home (P=-.03).

CONCLUSIONS: Almost half the sample appeared resilient during this important developmental period of transition to school. This enables clinicians to be cautiously optimistic in their work with high risk children and their families. However, over half the sample was not faring well. Child maltreatment and caregiver depressive symptoms were strongly associated with poor outcomes. These children and families deserve careful attention by pediatric practitioners and referral for prevention and early intervention services.

2. Effect of the interaction between childhood abuse and rs1360780 of the FKBP5 gene on gray matter volume in a general population sample


OBJECTIVE: The FKBP5 gene codes for a co-chaperone that regulates glucocorticoid receptor sensitivity and thereby impacts the reactivity of the hypothalamic-pituitary-adrenal (HPA)-axis. Evidence suggested that subjects exposed to childhood abuse and carrying the TT genotype of the FKBP5 gene single nucleotide polymorphism (SNP) rs1360780 have an increased susceptibility to stress-related disorders.

METHOD: The hypothesis that abused TT genotype carriers show changes in gray matter (GM) volumes in affect-processing brain areas was investigated. About 1,826 Caucasian subjects (age <= 65 years) from the general population [Study of Health in Pomerania (SHIP)] in Germany were investigated. The interaction between rs1360780 and child abuse (Childhood Trauma Questionnaire) and its effect on GM were analyzed.

RESULTS: Voxel-based whole-brain interaction analysis revealed three large clusters (FWE-corrected) of reduced GM volumes comprising the bilateral insula, the superior and middle temporal gyrus, the bilateral hippocampus, the right amygdala, and the bilateral anterior cingulate cortex in abused TT carriers. These results were not confounded by major depressive disorders. In region of interest analyses, highly significant volume reductions in the right hippocampus/parahippocampus, the bilateral anterior and middle cingulate cortex, the insula, and the amygdala were confirmed in abused TT carriers compared with abused CT/CC carriers.

CONCLUSION: The results supported the hypothesis that the FKBP5 rs1360780 TT genotype predisposes subjects who have experienced childhood abuse to widespread structural brain changes in the subcortical and cortical emotion-
processing brain areas. Those brain changes might contribute to an increased vulnerability of stress-related disorders in TT genotype carriers.


3. Childhood trauma, family history, and their association with mood disorders in early adulthood


OBJECTIVE: To assess the prevalence of childhood trauma and types of trauma on mood disorders among young adults in a population-based sample. We further gathered data on family history of mood disorders to test the hypothesis that childhood trauma is a mediating factor for the association between family history of mood disorder and mood disorder in adulthood.

METHOD: This is a cross-sectional study, including young adults with bipolar disorder, major depressive disorder, and matched controls without any mood disorder. Childhood trauma was assessed using the Childhood Trauma Questionnaire (CTQ). The Hicks and Tingley implementation was employed to assess whether trauma is a mediator of the effect of family history on diagnosis of any mood disorder.

RESULTS: All types of trauma were associated with both major depression and bipolar disorder, with the exception of sexual abuse, which was only associated with bipolar disorder. Moreover, family history of psychiatric illness was also associated with mood disorder in adulthood and with childhood trauma. Using the presence of any mood disorder as the outcome, a third of the effect of having any family history of mood disorder was mediated via childhood trauma.

CONCLUSION: This investigation provides further support, in a population-based sample of young adults, of the association between childhood trauma and mood disorders, with sexual abuse being specifically linked with bipolar disorder. The hypothesis that childhood trauma would function as a partial mediator of the association between family history of mood disorder and mood disorder in adulthood was also confirmed.

Intervention & Prevention

No papers identified.
Child Protection Professionals

1. Exploring the controversy in child abuse pediatrics and false accusations of abuse


**ABSTRACT:** There is a controversy in child abuse pediatrics between an established corps of child abuse pediatricians aligned with hospital colleagues and law enforcement, and a multi-specialty challenger group of doctors and other medical professionals working with public interest lawyers. The latter group questions the scientific validity of the core beliefs of child abuse pediatricians and believes that there are a substantial number of false accusations of abuse occurring. An unproven primary hypothesis, crafted around 1975 by a small group of pediatricians with an interest in child abuse, lies at the foundation of child abuse pediatrics. With no scientific study, it was hypothesized that subdural hemorrhage (SDH) and retinal hemorrhage (RH) were diagnostic of shaking abuse. That hypothesis became the so-called "shaken baby syndrome." Through the period 1975-1985, in a coordinated manner, these child abuse specialists coalesced under the American Academy of Pediatrics and began working with district attorneys and social workers, informing them of the ways in which their hypothesis could be applied to prosecutions of child abuse and life-altering social service interventions. In a legal context, using then-prevailing evidentiary rules which treated scientific expert testimony as valid if it was "generally accepted" in the field, they represented falsely that there was general acceptance of their hypothesis and therefore it was valid science. As the ability to convict based on this unproven prime hypothesis (SDH and RH equals abuse) increased, some defense attorneys were professionally compelled by their own doubts to reach out to experts from other fields with experience with SDH and RH, trauma, and biomechanics, for second opinions. Medical and legal challenges to the established thinking soon emerged, based on both old and new evidenced-based literature. As the intensity of the controversy increased, the probability of false accusation became more apparent and the need to address the issue more pressing. Since false accusations of child abuse are themselves abusive, efforts to eliminate such false accusations must continue.

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Reviews & Guidelines

1. Annual Research Review: Enduring neurobiological effects of childhood abuse and neglect


**BACKGROUND:** Childhood maltreatment is the most important preventable cause of psychopathology accounting for about 45% of the population attributable risk for childhood onset psychiatric disorders. A key breakthrough has been the discovery that maltreatment alters trajectories of brain development.

**METHODS:** This review aims to synthesize neuroimaging findings in children who experienced caregiver neglect as well as from studies in children, adolescents and adults who experienced physical, sexual and emotional abuse. In doing so, we provide preliminary answers to questions regarding the importance of type and timing of exposure, gender
differences, reversibility and the relationship between brain changes and psychopathology. We also discuss whether these changes represent adaptive modifications or stress-induced damage.

RESULTS: Parental verbal abuse, witnessing domestic violence and sexual abuse appear to specifically target brain regions (auditory, visual and somatosensory cortex) and pathways that process and convey the aversive experience. Maltreatment is associated with reliable morphological alterations in anterior cingulate, dorsal lateral prefrontal and orbitofrontal cortex, corpus callosum and adult hippocampus, and with enhanced amygdala response to emotional faces and diminished striatal response to anticipated rewards. Evidence is emerging that these regions and interconnecting pathways have sensitive exposure periods when they are most vulnerable.

CONCLUSIONS: Early deprivation and later abuse may have opposite effects on amygdala volume. Structural and functional abnormalities initially attributed to psychiatric illness may be a more direct consequence of abuse. Childhood maltreatment exerts a prepotent influence on brain development and has been an unrecognized confound in almost all psychiatric neuroimaging studies. These brain changes may be best understood as adaptive responses to facilitate survival and reproduction in the face of adversity. Their relationship to psychopathology is complex as they are discernible in both susceptible and resilient individuals with maltreatment histories. Mechanisms fostering resilience will need to be a primary focus of future studies.

Case Reports

1. Somnophilia and sexual abuse using vaginal administration of triazolam

Lauerma, H. Journal of Forensic Sciences Ahead of print [09/02/2016].

ABSTRACT: Somnophilia is a rare paraphilia, a form of sexual fetishism which is characterized by the desire to have sex with an unconscious human object who is unable to respond. To the author's knowledge, this is the first case study concerning somnophilic sexual abuse associated with vaginal administration of triazolam. The perpetrator video-recorded his sexual acts with two unconscious female victims with whom he also had normal sexual intercourse and who were unaware of his paraphilic activities. His Internet conversations with other persons whom he thought to be interested in somnophilic sex and his plans to kidnap a child were recorded by the police. It was evident that sex with an unconscious object played a specific fetishistic role for this man. He obviously used a combination of drugs mixed with alcoholic drinks to make his victims fall sleep and videotaped vaginal administration of triazolam used to deepen the victim's unconscious state.

http://dx.doi.org/10.1111/1556-4029.13050
Other

1. Less than human: a qualitative study into the experience of parents involved in the child protection system

Smithson, R. and M. Gibson Child Fam Soc Work Ahead of print [Epub 04/02/2016].


ABSTRACT: This paper reports on the findings from a qualitative study into the experiences of parents who were involved in the English child protection system in 2013. Seventeen in-depth interviews were conducted involving 19 parents and/or partners, and a framework approach was used to analyse the data. There were positive experiences of individual social workers and some positive experiences of the child protection system. However, the overwhelming theme of the parents' experiences was that the system was uncaring, inflexible and for some harmful to both themselves and their children. Despite being included in the child protection process, parents felt they were not afforded the same rights as a participant, as a decision-maker or as a partner in seeking to improve the situation. The threat of consequences silenced parents who felt unable to speak out or challenge the things they disagreed with or coerced others into signing agreements they did not agree to. Such experiences related to a sense that they were being treated as 'less than human'. These findings are considered within the context of recent reforms within the English child protection system.

2. Protecting future children from in-utero harm


ABSTRACT: The actions of pregnant women can cause harm to their future children. However, even if the possible harm is serious and likely to occur, the law will generally not intervene. A pregnant woman is an autonomous person who is entitled to make her own decisions. A fetus in-utero has no legal right to protection. In striking contrast, the child, if born alive, may sue for injury in-utero; and the child is entitled to be protected by being removed from her parents if necessary for her protection. Indeed, there is a legal obligation for health professionals to report suspected harm, and for authorities to protect the child's wellbeing. We ask whether such contradictory responses are justified. Should the law intervene where a pregnant woman's actions risk serious and preventable fetal injury? The argument for legal intervention to protect a fetus is sometimes linked to the concept of 'fetal personhood' and the moral status of the fetus. In this article we will suggest that even if the fetus is not regarded as a separate person, and does not have the legal or moral status of a child, indeed, even if the fetus is regarded as having no legal or moral status, there is an ethical and legal case for intervening to prevent serious harm to a future child. We examine the arguments for and against intervention on behalf of the future child, drawing on the example of excessive maternal alcohol intake.
Statewide Child Protection Clinical Partnership

Update

The first SCPCP Steering Committee meeting for 2016 was held on 24 February. As well as welcoming six new committee members, we spent time reviewing our activities for 2015 and agreeing a way forward for the New Year.

Over the last three months, the Partnership has prepared a draft response to the public consultation process for the review of the *Child Protection Act 1999*. A response was also submitted in relation to the Domestic and Family Violence Strategy and feedback provided regarding the Child Development Sub Network’s draft Child Maltreatment document. A response is currently being prepared in relation to the Queensland Family and Child Commission’s draft ‘Strengthening the Sector’ Strategy.

The start of the New Year will also provide an opportunity to review the work of the Partnership’s sub-groups. The South Queensland Child Protection Liaison Officer Clinical Network has been active in developing a child protection specific module in line with the Clinical Services Capability Framework and the Child Aware sub-group has drafted a questionnaire for statewide distribution to explore the extent to which child aware principles are used in practice.

Preparations are now underway for the *Annual CPA-CPLO Workshop* which will be held on 16 and 17 June 2016 at the Brisbane Convention and Exhibition Centre. The Workshop is an important event to support operational activities and networking opportunities between key child protection staff from around the State and we look forward to seeing many of our CPA and CPLO colleagues there.

Dr Ryan Mills

Clinical Chair
## Events

### March 2016

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<tr>
<th>Date</th>
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<td>Brisbane QLD</td>
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<td>18-19</td>
<td>Trauma-Informed Care for Stolen Generations Workshop for non-Aboriginal &amp; Torres Strait Islander Service Providers</td>
<td>Melbourne VIC</td>
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<td><a href="http://marumali.com.au/news-events">Details</a></td>
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References


30. Spano, R., We are family: Specifying the unique contribution of abuse and neglect of siblings on the prevalence, severity, and chronicity of maltreatment in the household. J Interpers Violence. Ahead of print [Epub 31/01/2016].