Strategies for the Medical Evaluation for Child Abuse in Children with Developmental Delays

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CME Disclaimer
The presenters:
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Objectives
- Recognize the risks for child abuse in children with developmental delays
- Explain the appropriate child abuse medical evaluation for a child who has developmental delays
- Review specific medical and communication considerations associated with children who have developmental delays
**Definition: Developmental Disabilities**

Developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas. Most occur in children in the U.S. from one or more developmental disabilities or other developmental delays.

https://www.cdc.gov/ncbddd/developmentaldisabilities/index.html

**Developmental Disabilities/Delay**

Developmental Disabilities

- Early intervention: a systematic process for identifying and assessing children who have developmental delays, developing plans for intervention, and implementing those plans.

- Interventions: a variety of activities designed to help children with developmental delays achieve their full potential.

- Services: a range of educational, medical, and social services available to children with developmental delays.

https://www.healthychildren.org/English/health-issues/conditions/developmental-disabilities/Pages/default.aspx

**Abuse and Disabilities - Scenarios**

- Children with disabilities resulting from abuse
- Children who are abused with undiagnosed disabilities
- **Children with developmental disabilities who are abused**
- Children with parents who have disabilities
Today’s Webinar

- Four speakers and four case discussions
- Specifically focusing the discussion on evaluation of child abuse in children with disabilities

“Teacher at school”

Vincent J. Palusci, MD MS
Professor of Pediatrics
NYU School of Medicine
Frances L. Loeb Child Protection and Development Center

“Teacher at school”

- 5 year-old boy was picked up from school Monday afternoon, and his mother noted scratches on his neck and bruises on his ear.
- He receives primary care at your office and you know the family well.
- His mother said he told her it was from a boy “teacher at school” but there were few other details. He did not have these marks over the weekend.
“Teacher at school”

- Patient history: Mild-Moderate Autism Spectrum Disorder. Has speech, but repeats questions and statements, and has limited vocabulary.
- Has an Individual Education Plan (IEP) and receives multiple therapies in school per the Office of People with Developmental Disabilities.
- No recent illnesses. No prior injuries at this school.
- Immunizations are up to date. No medications.
- No history of nosebleeds or family coagulation problems.

“Teacher at school”

- The mother asked if there was a male teacher at the school and was told there were none.
- She also asked if anyone knew how her son was injured and was told “it didn’t happen at school.”
- She spoke to other parents and found out there were male substitute teachers in the school.
- She also found out that the children in his class, some of whom had behavior problems, were fighting with him in class.

Prior Studies

- 1986 National Incidence Study for child abuse in the US: 35.5 per 1,000 children with disabilities were maltreated, compared to 21.3 per 1,000 children without disabilities, suggesting an epidemiologic connection.
- Physical abuse alone has been reported to be 3 times more likely among children with disabilities than among the general pediatric population (9% versus 31%). Spencer et al. found similar increases in the U.K.
- Another study found increasing proportions of children with physical and emotional disabilities associated with recurrence of abuse and neglect.
- A systematic review concluded that the evidence base for an association of disability with increased abuse and neglect is weak, and another review found that physical disability did not increase the risk for any type of victimization once confounding factors and co-occurring disabilities were controlled.
Think Abuse

T * E * N - 4 Bruising Rule

- T = torso
- E = ears
- N = neck
- 4 = age 4 months or less

Maguire, S. Which Injuries may indicate child abuse?


Table 1. Variables used in ordinal logistic regression. *Significant at 0.05 level. **Significant at 0.01 level.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head injuries</td>
<td>2.7 (1.4-5.0)</td>
<td>0.006</td>
</tr>
<tr>
<td>Wrist injuries</td>
<td>1.4 (0.8-2.6)</td>
<td>0.202</td>
</tr>
<tr>
<td>Facial injuries</td>
<td>1.1 (0.6-2.0)</td>
<td>0.827</td>
</tr>
<tr>
<td>Limb fractures</td>
<td>1.2 (0.7-2.2)</td>
<td>0.529</td>
</tr>
<tr>
<td>Posterior head/neck</td>
<td>1.7 (0.9-3.2)</td>
<td>0.104</td>
</tr>
</tbody>
</table>

Issues in Evaluation

- Increased vulnerability and dependence on caregivers
- Limited ability to communicate
- Need for specialized interviewing skills
- Complex medical needs, durable medical equipment, procedures
- Parents with potential intellectual developmental delay
- Confounding factors: social economic status, multiple caregivers, need for help with activities of daily living
- Treatment, referral, and reporting
What do you do?

- Parent believes it happened at school. Witnesses?
- Injury is inflicted/concerning for physical abuse.
- May have been caused by adult or other children.
- Children with disabilities have increased risk for maltreatment.
- Intellectual and developmental disabilities make it harder to evaluate for maltreatment.
- Injuries in special education class raise issues of potential dangers to other children, how they are being supervised, and reporting laws.

“Can he break his leg like that?”

Ann S. Botash, MD
Professor of Pediatrics
Upstate Medical University
Upstate Golisano Children’s Hospital

A Case of Fractures

- A 10 year old boy with a history of traumatic brain injury and paraplegia secondary to a motor vehicle accident presents with a femur fracture
- Osteopenia
- Vitamin D Deficiency
- Constipation
- Skin ulcers/dental erosions
- Deep venous thrombosis
History of Fractures

- This is his third femur fracture.
- First fracture was right femur — thought to have occurred while mom was doing PT (~ one year ago) — distal femoral metaphyseal fracture.
- Second fracture of left femur — states that he brought his leg up to his face and that is how he broke it — mid-shaft.
- Femur “nailed” with flexible nails to stabilize.
- Three months later, playing with sister, fell off couch and re-fractured the left femur.

Social Concerns

- Mom fell asleep during interviews for initial left femur fracture admission; suspicion of illicit drug use.
- Concerns about neglect - skin ulcers, tooth decay.
- Patient is the main historian.
- Multiple professionals involved in his care.

Consult and Concerns

- Impact statement written after initial fracture
- Consult regarding bones
- Orthopedic note indicating severe osteopenia
- Question from CPS: Are these fractures from abuse?
Fractures in People with Disabilities

- 85% of the fractures involved the extremities.
- Overall fracture rate increased as mobility increased.
- HOWEVER: Femur fracture rate was substantially higher with the least mobile patients.
- Femoral fracture rate DECREASED with age.
- Femur fractures were associated with non-traumatic events, such as diaper changes and transfers.
- Femur shaft fractures were strongly associated with previous femur fractures.


Specific Concerns for This Child

- Is some of his bone de-mineralization preventable with better care (i.e., does he have nutritional or physical activity neglect)?
- How much of the history is true?
- What is the best way to protect this child?

“Suspicion of Sexual Abuse in a Child with Global Developmental Delay”

Alicia R. Pekarsky, MD
Assistant Professor of Pediatrics
Upstate Medical University
Upstate Golisano Children’s Hospital
A Case of Sexual Abuse

- A 13 year old girl with a diagnosis of profound global developmental delay
- An official from the patient’s school reported mom to CPS because the patient’s “vaginal area was red, swollen and bruised.”
- Mom reports that the child has a new aide in school. This person is responsible for changing her diaper.
- Mom also reports that she has new gait sling.
- Mom checked her genital area after she returned home that day and did not notice anything different.
- Mom called her PCP and was referred to our program.

More History

- Her school district reported mom for alleged sexual abuse five years ago because the child’s pubic hair was shaved.
- Mom reports that she shaves the child’s pubic hair for hygiene purposes.
- The school was also concerned because she had “some vaginal discharge.”
- Mom reports that the child has scant vaginal discharge prior to the onset of her menses.
- Mom has never been concerned about sexual abuse.

Physical Exam

- General: young female child, in wheelchair; some utterances, but no clear expressive language. She has contractures, but in no acute distress. Mom is attentive.
- Neuro/Musculoskeletal: contractures, muscle wasting
- Perineum: shaved Tanner IV pubic hair with scant, thin greyish discharge in the fossa navicularis
- Hymen: fimbriated
- Urethra: normal
- Anus: small perianal tag at 12 o’clock in the supine position
Assessment

- This patient is a 13 year old pubertal female child with global developmental delay who was suspected to be a victim of sexual abuse by a school official based on this person's concern that her "vaginal area was red, swollen and bruised."
- Today her genital and perianal exams are normal though she does have a thin green/grey vaginal discharge. This finding is definitely concerning for an STI, but might also be caused by retained urine in combination with skin irritation.
- She is at increased risk of being the victim of sexual abuse given her developmental disabilities, but unfortunately her exam neither confirms nor denies the history of suspected sexual abuse.

Plan

- STI testing (all negative including Affirm for BV, Trich and Candida)
- Reinforced Sitz baths and gentle skin care with dye/scent free products
- Discussed assessment and plan with CPS
- Spoke with child's PCP
  - Asked her to call the school to discuss common hygiene practices (including shaving the pubic hair) and baseline GU exams (i.e. hygiene) for children with disabilities.
  - Encouraged her to schedule a follow-up appointment to discuss contraception.

What are the challenges in this case?

- Communication
  - With the patient given that she does not use words
  - With mom given her past negative interactions with CPS as well as the school district that reported her
- Multiple caretakers
- Physical examination
- Hygiene
- GYN and reproductive health care
Review of the Literature of Sexual Abuse and Disabilities

- Increased risk of sex trafficking in girls with intellectual disabilities.
- Men with a disability were more likely than men without a disability to report lifetime sexual violence.
- Cybervictimization leading to sexual solicitation risk is increased in those with developmental disabilities.
- Less likely to report.

“A Case of Bruising”

Linda T. Cahill, MD
Medical Director,
JE and ZB Butler Child Advocacy Center
8 Year Old Girl

- Diagnosed with pervasive developmental disorder, autistic, non-verbal at an early age.
- Parents devoted to her care rejected sedative treatment for lifelong aggressive, undisciplined and self-destructive behaviors because a relative of the mother died from sedative medication toxicity.
- School was failing to provide promised, enhanced special needs education services; parents were frustrated.
- Special education teachers noticed frequent bruises on her skin.
- Numerous reports to CPS of suspected abuse were coming from school, and from neighbors, the latter because of screaming from the apartment at all hours.

6 Months Later

- Family preservation worker assigned by CPS to assist the family observed the toddler twin siblings of patient shake in fear and have temper tantrums when she returned from school even before she entered the apartment.
- At home patient hit her mother, tried to hit the twins, pulled out her hair, and was increasingly difficult to deal with. Parents denied physical discipline of patient.
- Patient continued to wake up in the middle of the night with screaming tantrums, thereby generating angry responses from neighbors.
- The home situation was emotionally unhealthy (worker interpretation) and was not good for anyone in the family, especially the twins.

At the CAC

- Child was observed throwing herself into walls at every opportunity, punching her own legs and scratching herself.
- Parents were patient and effective at soothing her momentarily, but her short attention span did not allow her to remain soothed.
- During medical examination, patient was persistently grabbing her trunk with her hands and squeezing her skin.
- Lesions were noted in the exact configuration of fingers of her hand.
More Follow-up

- Family finally agreed to take the child for assessment for medications and other services.
- She was placed initially on Haldol.
- Over the years seroquel, trazodone and lithium were prescribed. In December 2016 lamotrigine was added, but none of her other meds were modified.
- In 2016 our patient, now 17 years, was admitted for diarrhea, chills, unable to walk.
- Symptoms related to high serum levels of lithium, question of whether accidentally ingested.
- She was observed self inflicting facial scratches. CAC was consulted.

Findings and Treatment

- In ED very agitated, lateral nystagmus, tremors, dry lips and mucous membranes.
- Treated for sepsis, diagnosed with lithium toxicity.
- Briefly dialyzed, restoring more appropriate lithium level.
- Scratching her face and picking at her skin, agitation continued, and she was in restraints for some of the one month long admission.
- Parents remained devoted to her care.

Stereotypical Self-injurious Behaviors in Children with Disabilities

- Skin cutting, picking, bruising
- Oral lesions (biting)
- Ingestions
- Head-banging
- Biting
- Trichotillomania
- Nail biting
- Other repetitive behaviors
Summary

- Adverse childhood experiences (ACE) and disabilities
- A higher percentage of persons with disabilities (36.5%) than those without disabilities (19.6%) report high ACE exposure.
- Increased risk of each measure of childhood sexual abuse (forced to have sex with an adult, being touched sexually by an adult, and being forced to touch an adult sexually).
- Persons with disabilities were more likely to report several ACE categories (smoking, poor physical health, poor mental health) than those without disabilities.

Austin HH, Proescholdbell, Simmons J. Disability and exposure to high levels of adverse childhood experiences: impact on health and risk behavior. 2013; NCAV 77(1): 30-36.
Considerations for Children with Disabilities and Suspicions of Child Abuse

- Who are the caregivers?
  - Respite needs
  - Caretaker backgrounds
- Risks for abuse/neglect specific to child’s needs
  - Is the child mobile?
  - What are the communication issues?
  - Other medical concerns
- Assessment of child’s abilities (self-injury? communication skills?)
- Responding to CPS should include provision of resources

Other Considerations

- Use of developmentally appropriate language.
- Self-injurious behaviors in a child that previously did not self-injure.
- Subtle changes in behavior may be meaningful.
- Regular “surveillance” by parents, caregivers, and primary care provider can assist in identifying abuse.

Risk Factors for Abuse in Children with Developmental Delays

- Enhanced vulnerabilities due to multiple caregivers
- Chronic stress of child care providers
- Parental attachment concerns
- Parental isolation
- Unrealistic expectations of the child’s performance
- Aggressive behaviors in the child
- Concurrent risk factors (such as a child with fetal alcohol and concerns of parental ongoing alcohol use)