WHEN IT'S NOT CHILD ABUSE

CHAMP Webcast
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Disclosure Statement

The presenters
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have no financial relationships with any commercial interests.

POST STREPTOCOCCAL SEQUELAE; SKIN AND MUCOUS MEMBRANES

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History

8 year-old non-verbal boy with Pervasive Developmental Disorder (PDD), in diapers, was sent for evaluation for physical and sexual abuse after this rash was noted by caregivers at his day school.

STREPTOCOCCUS IMPETIGO

Jennifer Canter, MD
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The Maria Fareri Children's Hospital
Valhalla, NY

Literature

J Pediatr. 2015 Sep;167(3):687-93.e1-2. doi: 10.1016/j.jpeds.2015.05.034. Epub 2015 Jun 10.

Clinical Perineal Streptococcal Infection in Children: Epidemiologic Features, Low Symptomatic Recurrence Rate after Treatment, and Risk Factors for Recurrence.

Clegg HW[1], Gifford PM[1], Anderson WE[2], Kaplan EL[3], Johnson DR[3].

Author information

Abstract

OBJECTIVES: To evaluate the epidemiology of perineal streptococcal infection and recurrence rates following amoxicillin treatment.

STUDY DESIGN: We used laboratory logs in a single pediatric practice to identify patients 0-18 years of age with perineal cultures positive for group A Streptococcus (GAS) and reviewed their medical charts. We described epidemiologic features, determined recurrence rates following antibiotic treatment, and performed a case-control study to identify possible risk factors for recurrence in patients treated with amoxicillin.

RESULTS: We found a perineal streptococcal infection rate of 4.6 per 10,000 patient encounters and a recurrence rate in 157 patients with perineal streptococcal infection of 12.4% after amoxicillin. In male patients, the predominant site of involvement was the perianal region (86%), and for female patients, the perivaginal area (62%). Nearly 80% of patients were 2-7 years of age (range 18 days-12.5 years). Perineal streptococcal infection and GAS pharyngitis followed a similar seasonal pattern of occurrence with 65% of perineal streptococcal infection occurring October through March. In patients with perineal streptococcal infection, 95% had a concomitant pharyngeal culture positive for GAS. Best predictive factors for recurrence after amoxicillin were longer duration of symptoms prior to diagnosis and having a sibling with perineal streptococcal infection at some time before or after the initial episode.

CONCLUSIONS: Following treatment with amoxicillin, we found a low recurrence rate of 12.4%. Amoxicillin can be expected to be reliable first-line therapy for perineal streptococcal infection.

PMID: 26095284 DOI: 10.1016/j.jpeds.2015.05.034

[PubMed - indexed for MEDLINE]

GETTING SOME "RUNS" FOR YOUR MONEY

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History

- One year-old girl presented to the Emergency Department with a rash.
- Noted when she awoke that AM.
- There was diarrheal stool in the diaper.
- This rash was noted by her mother.
- It was painful.
- The baby was otherwise healthy appearing.

Case Progression

- Burn Team was called.
- Social worker was involved.
- No social risk factors identified.
- Mother insisted she had not done anything to injure her daughter.
- A Child Protective Services report was made based on the burn team's report that this looked like an immersion burn.

The Culprit: “Little Tummies”

- Laxative that used to contain senna
- Mother had given her daughter a dose the day before.
- Case reports and a later study showed that senna can cause severe skin burns in children in diapers.
- Brief History
  - 1999 Phenolphthalein removed, replaced with senna, a natural plant derivative
  - 2001 Case reports of severe burns (4 cases)
  - 2003 Larger study confirmed this
  - No longer in most OTC children’s laxatives

Conclusions

- Mother and baby re-united.
- Burn Team contacts child abuse team on a regular basis.
- Multidisciplinary Team contacts child abuse program for all serious physical abuse cases.
- Child abuse is a “team sport.”

Literature

Ann Pharmacother. 2003 May;37(5):636-9.

Skin breakdown and blisters from senna-containing laxatives in young children.

Spiller HA[1], Winter ML, Weber JA, Krenzelok EP, Anderson DL, Ryan ML.

Author information

Abstract

BACKGROUND: At the direction of the Food and Drug Administration, phenolphthalein was removed from all over-the-counter laxatives in 1999. Phenolphthalein was then replaced in most laxative products with the natural product senna from Cassia acutifolia Delile, which contains various anthraquinones. No data are available on the safety of senna use in children <6 years of age.

OBJECTIVE: To describe the clinical outcomes of exposure to unintentional ingestion of senna-containing laxatives in young children.

METHODS: All ingestion exposures of senna-containing laxatives in children <5 years of age from 6 poison centers over a 9-month period were evaluated. Inclusion criteria required 24-hour follow-up and the presence of diarrhea to confirm ingestion. Parents were told routinely that severe diaper rash was possible and to protect the perianal area with frequent cleansing and a barrier ointment if the child was wearing diapers.

RESULTS: During the study period, 111 cases were reported: 19 children experienced no diarrhea, 4 were lost to follow-up, and 88 exposures were evaluated. Fifty-two children (59%) were </=2 years old. Fifty children remained in diapers, 28 children were fully toilet trained, and 10 wore diapers (pull-up pants) overnight. Twenty-nine children (33%) experienced severe diaper rash. The mean +/- SD time to recognition of the diaper rash was 15.6 +/- 8.6 hours. Ten children (11%) had blisters and skin sloughing. There was a significant increase in severe diaper rash ($p < 0.05$) and onset of blisters and skin breakdown ($p < 0.05$) in children wearing diapers versus those who were fully toilet trained. The mean time to onset of blisters was 14.5 +/- 6.8 hours. Skin burns and loss were seen primarily on the buttocks and perineum, loosely following the diaper area.

CONCLUSIONS: Unintentional ingestion of senna-containing laxatives in young children may potentially cause severe diaper rash, blisters, and skin sloughing.

NONSEXUAL ACUTE GENITAL ULCERS: *UNUSUAL ASSOCIATION*

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Outline

- Case presentation
- Case report
- Nonsexual acute genital ulcers (NAGU)
- Conclusion

Case Presentation

- 15 year-old healthy female p/w 3-day history of fever, headaches, nausea, photophobia, malaise and arthralgia/myalgia
- Also reported to have painful labial ulcers over last 2 days → difficulty walking
- **Not** sexually active

Case Presentation

Pertinent findings on PE:

- Febrile (38.4 C), tachycardic (106 F)
- Appears to be in pain but alert
- Headache elicited by moving neck but full ROM
- Neurological exam normal
- Multiple tender ulcerative lesions on labia extending into vaginal introitus

Case Presentation

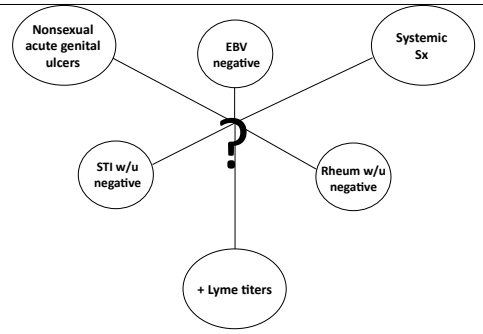
- LP performed due to concerns of meningitis
- STI and rheumatologic w/u due to labial ulcers
- Lyme titers drawn due to working outdoors in summer camp

Case Presentation

- Started on IV Vancomycin, Meropenem (allergy to Cephalosporins) and Acyclovir
- Admitted to the floor

Case Presentation

- CSF showed **no pleocytosis** (WBC=0). Full sepsis w/u neg.
- **STI w/u neg**: wet prep, KOH, Gram stain, GC/Chlamydia PCR, RPR, HIV screen, labial HSV PCR
- EBV panel not consistent w/ acute infection
- RF, ANA and ANCA neg. Ophthalmologic exam neg.
- **Lyme IgM + 3/3 bands.** IgG neg.



Disseminated Lyme Disease Presenting With Nonsexual Acute Genital Ulcers

Justin J. Finch, MD; Jenna Wald, MD; Katalin Ferenczi, MD; Saima Khalid, MD, MPH; Michael Murphy, MD

JAMA Dermatology November 2014 Volume 150, Number 11

Case Report

- 50-year-old female p/w a 3-week history of rapidly expanding painful vaginal ulcers, fever, malaise, neck/ back pain, and round lesions on arms/shoulders
- Vaginal ulcers progressed despite PO Ciprofloxacin, PO Prednisone and topical Neomycin.
- Not sexually active. No history of STI. No oral ulcers. No ocular symptoms.

Finch JJ, Wald J, Ferenczi K, Khalid S, Murphy M. Disseminated Lyme disease presenting with nonsexual acute genital ulcers. *JAMA Dermatol.* 2014;150(11):1202-4

Case Report

- Biopsy of ulcers showed polymorphous inflammatory infiltrate w/o organisms, malignancy or vasculitis.
- CG/Chlamydia, RPR, HIV, HSV-2, Babesia, Ehrlichia, ANA, pathergy test negative
- **Lyme titers positive**
- Resolution of symptoms 48 hours after starting Doxycycline

Finch JJ, Wald J, Ferenczi K, Khalid S, Murphy M. Disseminated Lyme disease presenting with nonsexual acute genital ulcers. *JAMA Dermatol.* 2014;150(11):1202-4

NAGU

- Nonsexual acute genital ulcers (NAGU), or *Lipschutz ulcers*, are a rare vulvar skin condition typically affecting girls and young women.
- Acute onset of single or multiple painful genital ulcers
- Most cases associated with nonspecific systemic symptoms

Finch JJ, Wald J, Ferenczi K, Khalid S, Murphy M. Disseminated Lyme disease presenting with nonsexual acute genital ulcers. *JAMA Dermatol.* 2014;150(11):1202-4

NAGU

- Etiology not identified in 75% of cases
- Some cases associated w/ infections:

  EBV, CMV, Mycoplasma, HIV, Mumps, Influenza A, T. gondii

- Genital ulcers may result from a strong immune response to infection → ? systemic symptoms ?

Finch JJ, Wald J, Ferenczi K, Khalid S, Murphy M. Disseminated Lyme disease presenting with nonsexual acute genital ulcers. *JAMA Dermatol.* 2014;150(11):1202-4

Other Etiologies

Behçet's disease, lichen planus, lichen sclerosus, IBD, Sweet syndrome, Reiter syndrome, blistering skin diseases, and drug reaction[1,2]

1.Huppert JS. Lipschutz ulcers: evaluation and management of acute genital ulcers in women. *Dermatologic Therapy*. 2010;23:533-540.

2.Trcko K, Belic M, Miljković J. Ulcus vulvae acutum. *Acta Dermatovenerol Alp Pannonica Adriat.* 2007;16(4):174-6.

Back to Our Patient

- 15 year-old female w/ NAGU associated w/ Lyme disease
- Started on PO Doxycycline 100 mg BID for 21 days
- Labial ulcers and systemic symptoms were resolved few days after starting Doxycycline.

Conclusion

- To our knowledge, this is second case of **nonsexual acute genital ulcers** associated w/ **Lyme disease**.
- Association and **not** causation
- Lyme disease should be considered in women presenting with NAGU, especially in **endemic areas**.
- Other infectious, rheumatologic and dermatologic etiologies should be ruled out.

CASE #1
PERIURETHRAL SUPPORT BANDS

Jamie Hoffman-Rosenfeld, MD
Medical Director, Queens CAC
Forest Hills, NY

Case

- 7 year-old girl presents to pediatrician with bleeding from private parts; no pain or dysuria.
- History of fall from monkey bars 3-4 weeks prior, landing on scooter; at the time grabbed “private” and said she hurt herself.
- No blood noted at the time of the fall.
- Primary care provider does exam and says she looks “weird.”
- Referred to Pediatric GYN – exam normal; no site of bleeding seen.

Case (cont.)

- Bleeding continues intermittently; mother not certain if it is from the vagina or anus.
- Primary care provider refers to a pediatric dermatologist.
- Pediatric dermatologist sees “two cuts in vagina” and makes report to the NYS Central Register.
- CPS tells the mother to take 7 year old to an Emergency Department – 2 lacerations seen.
- Referred to Child Advocacy Center.

Are these cuts??

Periurethral support bands - Small bands lateral to the urethra that connect with periurethral tissue to the wall of the vestibule: these normal supportive structures are also called vestibular bands and support bands.

Do pediatric chief residents recognize details of pre-pubertal female genital anatomy?

- Dubow, Giardino, Christian, and Johnson
- Child Abuse and Neglect Journal
- February 2005
- A National Survey

How often do you routinely examine the genitalia of a girl?

- Always (100%) 12%
- Most of the time (>90%) 38%
- Usually (70-90%) 31%
- Sometimes (50-69%) 9%
- Less than half the time 10%

Percentage Of Respondents Identifying Structure Correctly

- Clitoris 94%
- Posterior commissure 87%
- Urethra 63%
- Labial minora 90%
- Labia majora 80%
- Hymen 64%

Pergamon

Child Abuse & Neglect

Child Abuse & Neglect 26 (2002) 1235–1242

Genital examinations for alleged sexual abuse of prepubertal girls: findings by pediatric emergency medicine physicians compared with child abuse trained physicians

Kathi L. Makoroff[a,*], Jamie L. Brauley[b], Ann M. Brandner[b], Patricia A. Myers[b], Robert A. Shapiro[a]

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Study Results

- 4 year period
- 46 patients with non-acute findings felt to be significant for abuse were referred
- 32 (70%) – Normal
- 4 (9%) – Non-specific
- 2 (4%) – Concerning
- 8 (17%) – Diagnostic

ARTICLE

Child Abuse Training and Knowledge: A National Survey of Emergency Medicine, Family Medicine, and Pediatric Residents and Program Directors

Suzanne P. Starling, MD[a,b], Kurt W. Heisler, MS, MPH[a,b], James F. Paulson, PhD[a], Eren Youmans, MPH[a]

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The authors have indicated they have no financial relationships relevant to this article to disclose.

What's Known on This Subject

Both practicing pediatricians and residents report discomfort with child abuse evaluations. Medical training in child abuse is inadequate in the United States. Studies have addressed comfort and training but have not directly assessed child abuse knowledge.

What This Study Adds

This study assessed child abuse knowledge, training, and comfort levels of physicians. It also is the first to compare the training and knowledge among the 3 specialties most likely to encounter abused children first: pediatrics, emergency medicine, and family medicine.

Pediatrics 2009;123:e595–e602

Results - Correct Identification of Anatomy

	CETCAN	Starling II
Hymen	64%	87%
Urethra	54%	57%
Labia Minora	21%	30%
Correct identification of all 3 structures	12%	19%

CASE PRESENTATION #2
EXPOSED PECTINATE LINE

Case #2

- 3 year-old boy transferred to hospital in complete cardiac arrest; at time of arrival, exam compatible with brain death.
- Child Abuse Pediatrician consulted because of vague history and unclear circumstances.
- Complete exam including anal and genital exams normal.
- After official declaration of brain death, exam conducted by a medical provider from the organ harvesting/transplant team.
- Diagnosis of “anal tear” made.
- Several days into hospitalization, the question of sexual assault is raised.

The American Journal of Forensic Medicine and Pathology 17(4):289–298, 1996.

Postmortem Perianal Findings in Children

John McCann, M.D., Donald Reay, M.D., Joseph Siebert, Ph.D., Boyd G. Stephens, M.D., and Stephen Wirtz, Ph.D.

The postmortem finding of anal dilation or an exposed pectinate line in children who have died under suspicious circumstances continues to raise the concern of possible sexual abuse. The following multicenter, collaborative study was designed to help address that question. Sixty-five subjects, ranging in age from birth to 17 years, were autopsied at three different sites. A standard protocol along with 35-mm cameras were used to record

On occasions, a postmortem perianal finding in a child will raise the issue of possible sexual abuse. Two of the more common reasons for this concern are a dilated anus and the exposure of the pectinate line. The latter finding can look like a series of deep clefts in the rim of the anus and may be con-

Postmortem Examination

- No sign of perianal/anal trauma found at autopsy.

Summary

Mimics for child abuse can include:

- Infections
- Chemical contact (dermatitis)
- Normal structural findings (genital)
- Other

Discussion

Linda Cahill, MD	Perianal Strep
Jennifer Canter, MD	Strep Impetego
Ann Lenane, MD	Senna burn
Yorgo Zahlanie, MD	NAGU from Lyme disease
Jamie Hoffman-Rosenfeld, MD	Periurethral support bands & exposed pectinate line