Pediatric Update: Avoiding Common Diagnostic Pitfalls

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“Children invariably recover from illnesses, except for the small minority for whom this rule does not apply

30 minute/60 minute version
Patient 1

- 29 yo. G1P1 exposed to son 7 AM, 4/24/10, 14 weeks pregnant

- No known exposure for son; mother possible exposure at age <1 yo, and possibly developed rash with 1 vesicle

- Mother calls at about 92 hours following exposure and arrives about 96 hours after exposure.

- What options would you exercise re history and intervention? (acyclovir, VarZIG®, IVGG)
Avoiding Common Pitfalls

- With high risk patients use caution
- With high risk patients don’t hesitate to use the phone—To a Point!
- Consider which patients are high risk
  - Pregnant / Neonates / Immunocompromised
    Those severely ill or with rapidly progressive disease
    Those in whom a treatable condition is considered, where treatment is easily achieved
    Those with a significant history of travel/Nantucket/abroad.
  Words: “massive, never happens” “avoid tunnel vision”
The number of payments resulting from settlements -- which predominate -- are now clearly heading down. As for payments resulting from judgments: Holding steady; no explosion there.
Figure 3: Total value of malpractice payments

- **Inflation-adjusted**
- **Unadjusted**

- 1991: $2.1 B
- 1994: $2.0 B
- 1997: $2.5 B
- 2001: $4.2 B
- 2003: $2.3 B

Public Citizen
Congress Watch
April 2005
## 2006 Payments: Amount and Time to Resolution Vary by State

<table>
<thead>
<tr>
<th>State/Rank</th>
<th>Mean Payment ($)</th>
<th>Incident to Payment (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois/1</td>
<td>619,205</td>
<td>5.82</td>
</tr>
<tr>
<td>Ohio/25</td>
<td>310,573</td>
<td>5.45</td>
</tr>
<tr>
<td>Indiana/36</td>
<td>322,822</td>
<td>6.38</td>
</tr>
<tr>
<td>Vermont/50</td>
<td>125,795</td>
<td>3.98</td>
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</tbody>
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2006 National Practitioners Data Bank Annual Report
5.5 Percent of Doctors Are Responsible for 57.3 Percent of Medical Malpractice Payouts

Doctors with Repeated Malpractice Payouts Suffer Few Consequences

Public Citizen
Congress Watch
April 2005
40% of 1452 claims reviewed did not involve medical errors; of these 27% resulted in compensation

Of 60% that did involve error, 73% resulted in compensation

54% of Payouts eaten up by admin costs

Error: Confidence Level and Payment

When you are sued

- 15-25% of MDs are sued yearly
- Career risk is about 70%

My conclusion: GET A GOOD LAWYER!
7 yo boy carried to ED at 10 am by Mom because he awoke at 5 am lethargic with headache, fever of 105°, shaking chills and vomiting. Triage nurse describes as “very ill – appearing”;
V.S: T:103.2° P:138 R: 18  BP ?? RA O₂ sat: 98%
PE: No Acute Distress
HEENT: normal, no neck stiffness
Chest: clear, Abd: benign

Work out differences of opinion before discharge
Case 2

- Mom returns to EM at 14:00 because she noticed a rash and fears meningococcal meningitis
- VS: T:97.7° P:148 R: 40 BP ? o₂: 95% (RA)
- Exam at 14:30: purpuric rash in groin, back; “slight” neck stiffness
- ED nurses notes show that patient remained dressed in PJs for MD exam during first ED visit
  - Consider guideline driven care
  - Avoid tunnel vision
IDSA Guidelines for Children in Whom Bacterial Meningitis is Suspected


Suspicion for bacterial meningitis

↓ Yes

Immunocompromise, history of selected CNS diseases,\(^{a}\) papilledema, or selected focal neurologic deficit,\(^{b}\) or delay in performance of diagnostic lumbar puncture

No

Blood cultures and lumbar puncture STAT

↓

Dexamethasone\(^{c}\) + empirical antimicrobial therapy\(^{d,e}\)

↓

CSF findings c/w bacterial meningitis

↓ Yes

Continue therapy

Yes

Blood cultures STAT

↓

Dexamethasone\(^{c}\) + empirical antimicrobial therapy\(^{d}\)

↓

Negative CT scan of the head

↓

Perform lumbar puncture
Case 2: Take Home Lessons

- Examination of the skin is easier if the patient’s clothes are removed first
- BP is an important Vital Sign with SIRS
- Leukopenia and neutropenia may or may not predict significant disease\(^1\)
- Juries believe that earlier diagnosis naturally means better outcome

Tale of a 2 Year -Old Altered Mental Status
Case 3

- Three week history of “not feeling well”, and an eye infection. She was seen twice by her physician and treated for an eye infection.
- She became increasingly unresponsive and somnolent, and a CT of the head revealed a large frontal contusion.
- She was referred to PICU and Surgical service for “suspected abuse”.
  - Again, “you don’t know what you don’t know”
  - Surround yourself with people you trust
12 year old With Spleenomegaly

Case 4

- Patient was well except for 4 days of crampy Abd pain, two weeks prior to referral, but no fever and no other signs or symptoms. CBC-nl, except for Hgb of 15.2. mono and EBV studies all negative.
- PMH-noncontributory. PE-nl. !
- Ultrasound showed a spleen with the longest diameter of 11 cm.
- Repeat U/S? Get CAT scan? Additional labs?
11 YO “With Unresolved Changes in Physiologic Status”

- Two weeks ago patient had a brief episode of palor and mild headache. Since then she has continued with some lethargy and loss of appetite.
- 5 days PTA, she had confusion, fever and “imbalance.” She was treated with amoxicillin for strep throat, but no culture was obtained.
- For the next 5 days she was not herself, but no significant worsening until the day of adm...
On the morning of admission she was seen at a clinic and sent home, even though she was unable to give DOB, or first name.

Later that day she was noted to have a Left sided seizure, involving lips and head turning to the left.

Labs day of adm:  Glu-102, Na-141, BUN-26, WBC-11.4 with mild left shift, and platlets-517K.

CSF-WBC-66/mm³, RBC-4, Glu-54, Prot-70.
Case 5: Unilateral Face, Jaw, Neck Swelling

- Patient with known H/O nephrotic syndrome, on immunosuppressant therapy, He presents with several weeks of face and jaw swelling. It is tender, but there are no constitutional complaints.

- Several days before biopsy, it drained spontaneously.

- Meds include prednisone, enalapril, amlodipine
Classic appearance of a sulfur granule in the deep tissue. There are surrounding acute and chronic inflammatory cells (red arrows).

At 40X the filamentous rodlike organisms can be demonstrated at the edge of the sulfur granule (arrows).
Patient 6-GT

- 15 mo, admitted to PICU w 8 day H/O fever, loose stools, and 3 days irritability.
- On transfer from referring hosp-he was noted to have ^BUN, Cr, CRP, WBC. 57/1.5/17/31K(plat-64)
- PE: no rash; ENT-nl; lungs, heart, abd-nl.
- Lab: U/A + nitrates, leucocytes, Hgb. C/S- E. coli
- Hosp. Course: fever and tachycardia improved with IV fluid bolus.
  - Consider those illnesses that are easily treated, especially if failure to treat results in catastrophic outcomes