

Vulnerable Child Syndrome

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Cases of Vulnerable Child Syndrome (VCS)?

6 mo ex-34 week boy with AOM admitted to SCVMC for IV abx. Saw 3 providers prior to admission. Parents extremely anxious. Child is febrile but well-appearing and playful.



Cases of Vulnerable Child Syndrome (VCS)?



Now 40 and 2 week ex-24 week boy, s/p severe medical NEC, awaiting surgery for stricture. Parents are Spanish-speaking, tearful. Want to transfer care from SCVMC to Stanford.

Description

- First coined by Green and Solnit in 1964: “parental reactions to an acute, life-threatening illness in a child may have long-term psychologically deleterious effects on both parents and children”

Diagnostic Criteria¹

- A real or imagined event in the child's life that the parent considered to be life-threatening
- Parent's continuing unrealistic or disproportionate belief that the child is esp susceptible to illness or death
- Presence of symptoms in the child that appear disproportionate to the apparent level of illness or impairment

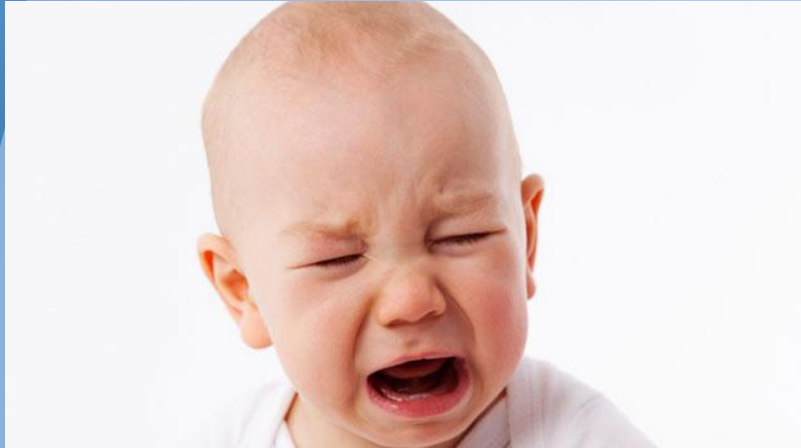
Risk Factors for VCS

Neonatal:

- prematurity
- congenital anomalies
- neonatal illness (including jaundice)



Risk Factors for VCS



Early Childhood:

- colic/spitting up
- hospitalizations (including r/o sepsis)
- self-limited illnesses (e.g. croup, gastro)

Examples from Literature

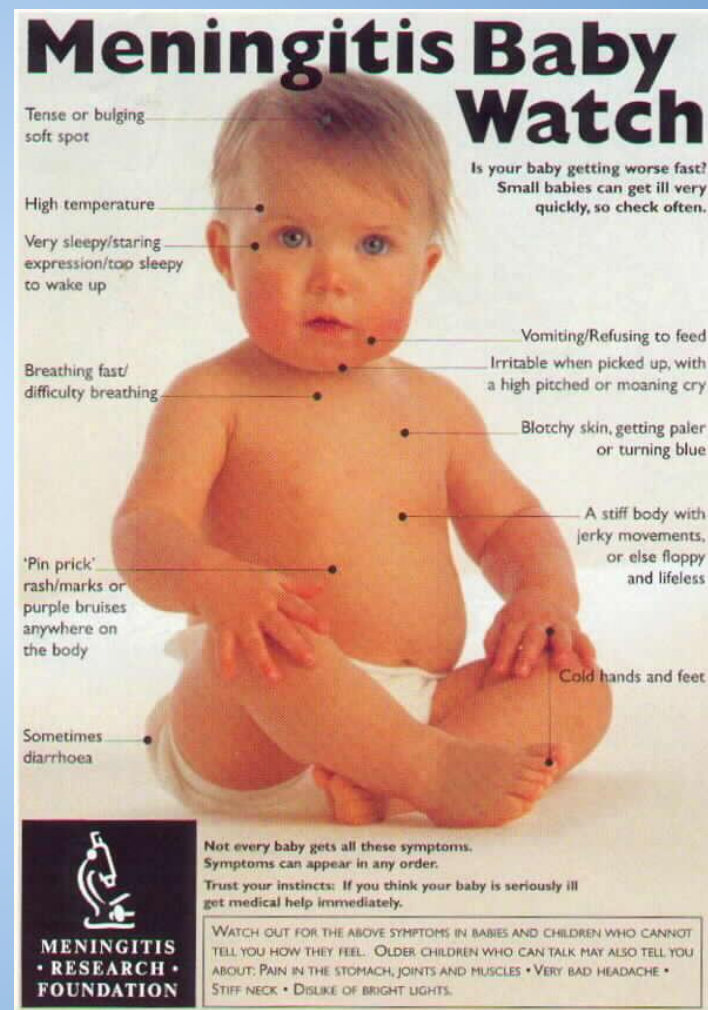
Ex. Behavioral Pediatrics 1975.
25 families: one child
hospitalized for GE b/w 2-5
yo. At least one sibling for
control. Now all 8-12 yo. 10
had been severely ill based
on objective criteria.



Conclusions: Compared to siblings, "severely ill" had significantly more conduct problems and excessive dependence.

Examples from Literature

- Levy *Pediatrics* 1980: 750 parents randomly interviewed in ED
- 200 children identified as "vulnerable" by parents (but 81, or 40%, not considered vulnerable by physicians)
- "Miscommunication" identified as risk factor: (Ex. 5 parents worry about meningitis with all future febrile illnesses)



Risk Factors for VCS

Parental factors:

- Fertility problems: history of infertility, recurring miscarriages or stillbirths
- Pregnancy or delivery complications
- Parental anxiety or depression



Examples from Literature

- Allen et al. *Pediatrics* 2004
- Prospective cohort of 116 babies (<32 wks w/CLD. Gave Bayley, Vineland, VCS at 1 yo.
- Conclusions: Higher PPCV w/ maternal anxiety** or depression, longer hospit., non-firstborn, greater impact of illness on family. PPCV NOT assoc. w/ age, educ., income, marital status, ethnicity, or severity of illness.

Presentation

Child behaviors:

- Recurring minor illnesses
- Sleep problems
- Hyperactivity, inattention
- School underachievement
- Learning difficulties



Presentation

Parental behaviors:

- *Excessive concern and high frequency of health care use*
- Separation difficulties
- Overindulgence
- Overprotectiveness
- Inability to set age-appropriate limits



VCS Studies

- *Bergman and Stamm 1967*: 40% of parents told that their child had an innocent heart murmur restricted that child's athletic activity into early adolescence
- *Chambers et al 2011*: Children with high scores on the Vulnerable Child Scale (<40) had increased number of ED visits

VCS Studies (continued)

- *Kemper et al (85 infants, 1987-88)*: mothers of infants with jaundice (TSB ≥ 12 mg/dL) were less likely than mothers of control infants to leave their infants with another person, more likely to bring them for well-child, sick, and ED visits
- *Usatin et al (1995-2004)*: only a small increase in first-year outpatient visit rates

Assessment

- Meticulous history and physical
 - Uncover what initiated parental anxiety
- Vulnerable Child Scale
- Child Vulnerability Scale (infants: Vulnerable Baby Scale)

Vulnerable Child Scale

1. In general, my child seems less healthy than other children of the same age.
2. I often think about calling the doctor about my child.
3. When there is something going around, my child usually catches it.
4. My child seems to have more accidents and injuries than do other children.
5. *My child usually has a healthy appetite.*
6. Sometimes I get concerned that my child doesn't look as healthy as he or she should.
7. My child usually gets stomach pains or other sorts of pains.
8. I often have to keep my child indoors because of health reasons.
9. *My child seems to have as much energy as other children of the same age.*
10. My child gets more colds than do other children of the same age.
11. I get concerned about circles under my child's eyes.
12. I often check on my child at night to make sure he or she is OK.
13. I feel anxious about leaving my child with a babysitter or at child care.
14. I sometimes am unsure about my ability to care for my child as well as I should.
15. I feel guilty when I have to punish my child.

Management

- Address the connection between past and present episodes
 - "Do you have special concerns or worries about John's health? Do you worry that John might become seriously ill?"
- Re-educate parents about their child's health
 - Note normal findings
- Regular communication
 - Be exact and clear
- Support parents in changes

Prevention

- Offer prospective counseling in at-risk settings
- Describe VCS explicitly to families at risk
- Monitor for parental anxiety and stress or other risk factors

Back to the Cases

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