

Alarming signs in Neonatal outpatient visits




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Concerning History

Perinatal and postnatal: maternal fever, PROM, GBS, chorioamnionitis, prematurity, SGA, IDM



Family History: Sudden unexplained death in first- or second-degree relatives before age 35, especially in infancy; known genetic conditions such as long QT syndrome or inborn errors of metabolism. [Children's Mercy](#)

Environmental Exposures: Contact with toxic substances or drugs



Caregiver Concerns: poor feeding, vomiting, lethargy, irritability, temperature issues

Vital Signs

Temp: $<36.5^{\circ}\text{C}$
(hypothermia) or
 $>38^{\circ}\text{C}$

- Axillary method preferred in outpatient care


- Hypothermia:
Mild (36-36.4),
Moderate (32-35.9), Severe (<32)

HR: <100 or >180
bpm

RR: >60 or signs of
distress,
bradypnea, apnea

Behavioral & Neurologic Red Flags

Lethargy, irritability, weak/high-pitched cry



Poor feeding or refusal to feed



Seizures, jitteriness, new onset of strabismus



Hypo-/hypertonia



A decrease in the level of alertness and responsiveness

Physical Exam

- ▶ Skin: cyanosis, jaundice <24 h, pallor, petechiae, mottling
- ▶ Fontanelles: bulging (\uparrow ICP), sunken (dehydration)
- ▶ Chest: retractions, asymmetry
- ▶ Abdomen: distended, umbilical redness/discharge
- ▶ Extremities: tone/asymmetry/limited movement

Feeding Red Flags

Normal:

- $\leq 7\%$ loss in first 3-5 days
- Regain birth weight by day 10-14
- Gain ~125-200 g/week after

Red Flags:

- $> 7-10\%$ loss
- < 6 wet diapers/day by day 5
- Poor latch, prolonged feeds, sleepy or unsatisfied after feeds

Conclusion & Takeaways



Outpatient visits are critical for early detection



Caregiver concerns are valuable—listen closely



Combine history + vitals + behavior + physical findings



Act early when red flags present—don't delay referral



Use checklists, growth charts, and structured assessments

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هرگز نمی‌توان متخصص
کودکان شد؛ این راه را دل
می‌رود، نه فقط دانش و
مهارت

عاشقان عیدتان مبارک



BRUE - Overview

- ▶ BRUE = Brief Resolved Unexplained Event
- ▶ Occurs in infants <12 months with sudden, brief, resolved, and unexplained episode involving:
 - ▶ Cyanosis or pallor
 - ▶ Absent, decreased, or irregular breathing
 - ▶ Change in tone (limp or stiff)
 - ▶ Altered responsiveness
- ▶ 🩺 Duration: <1 minute
- ▶ ✅ Resolved and normal exam after event
- ▶ ⚠️ Replaced ALTE (Apparent Life-Threatening Event)

Risk Factors

High-Risk BRUE Factors:

- Age < 60 days
- Prematurity (<32 weeks GA, <45 weeks corrected)
- Multiple/recurrent events
- Duration >1 minute
- Abnormal exam findings
- CPR by trained provider
- Concerning history (e.g., seizures, family history, abuse)

Bathing as a BRUE Trigger - Prevention

Bathing-Related BRUE Risks:

- Cold/hot water → thermal stress
- Sudden handling → vagal stimulation
- Accidental water aspiration

Prevention Tips:

- Use lukewarm water (37-38°C)
- Warm, draft-free room
- Gently introduce water (feet first)
- Support head and neck
- Never pour water over face or immerse head
- Supervise constantly; never leave infant alone

Oral Medication - Risk & Prevention

Oral Medication as Trigger:

- Choking, gagging → apnea or cyanosis
- Vagal stimulation
- Sedative or toxic side effects
- Improper dosing

Safe Practices:

- Use oral syringe for accuracy
- Hold baby semi-upright
- Administer slowly into side of cheek
- Let infant swallow between doses
- Monitor for signs of distress (color change, apnea, coughing)