Lecture 3: The Acutely Unwell Child – Recognising the Small Percentage

Minor, Self-Limiting Illnesses (Most Children)

Strong Compensation





Rapid Deterioration

Clinical Status

Time

Early Recognition is Critical:

Sepsis | Meningitis | Severe Breathing Difficulty

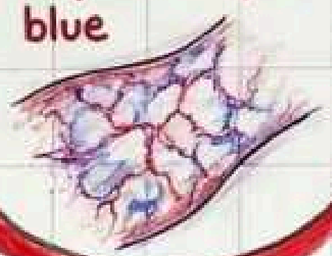
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The Traffic Light System

¶ 3.2

Low Risk	Intermediate Risk	High Risk

Appearance:
Pale, mottled, or blue



Behavior:
Floppy, not responding normally, hard to wake

Cry:
Weak, high-pitched, or continuous

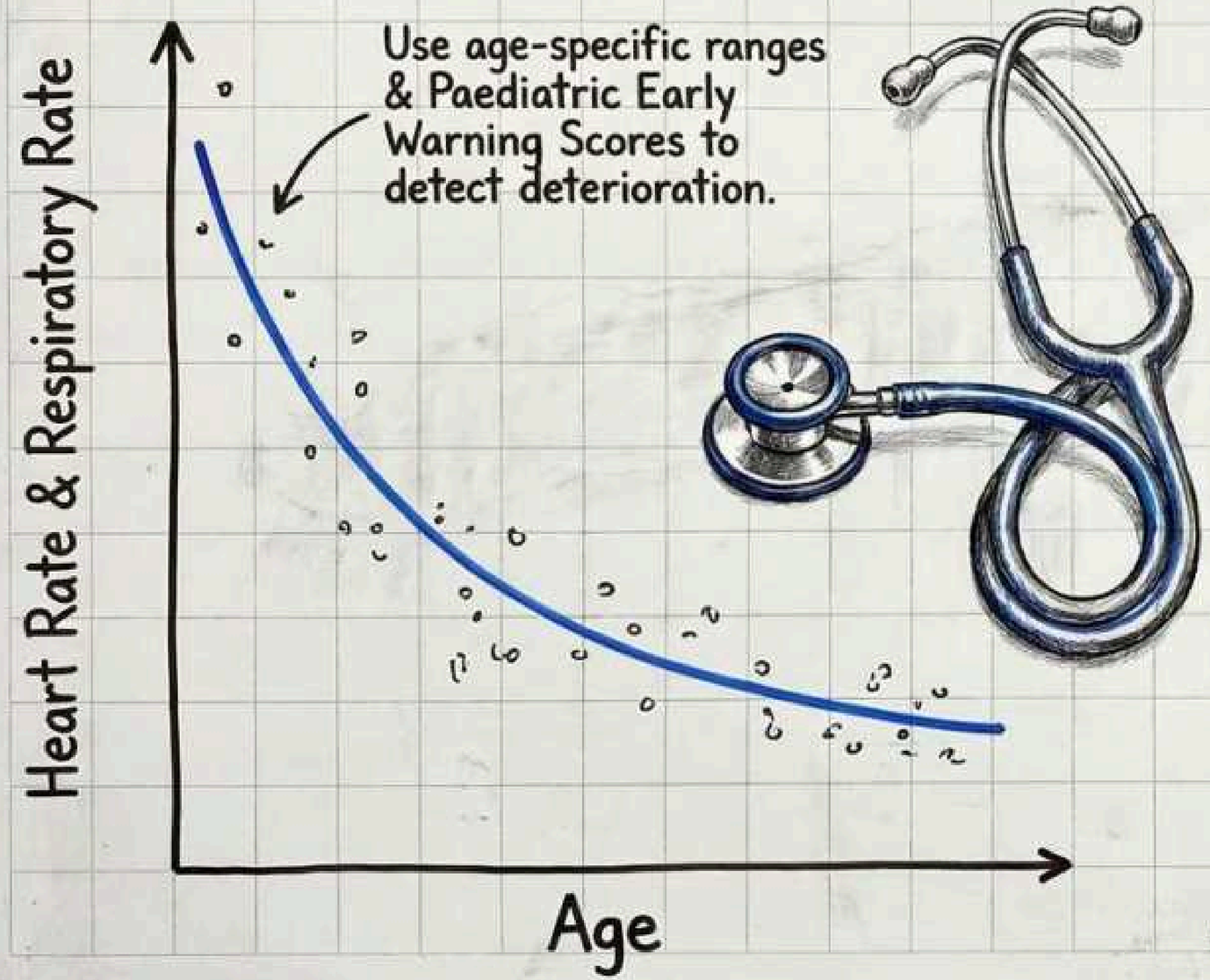
Breathing:
Grunting, fast breathing, drawing in of the chest

Input/Output:
Reduced fluid intake, few wet nappies

Skin:
Non-blanching rash

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Age, Vitals, and Mathematics



Drug Dose (mg) =

Patient Weight (kg)

×

Target Dose (mg/kg)

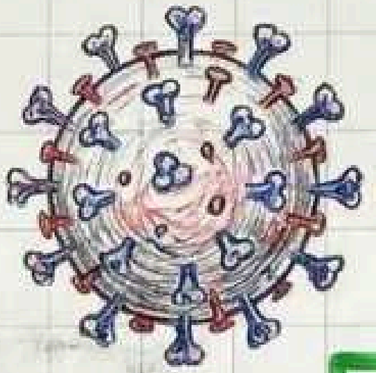
Fluid volumes are also calculated by weight.

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The Fever Paradigm

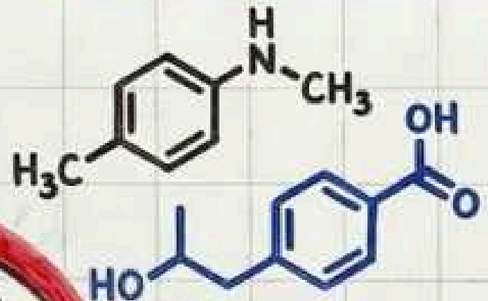
Fever Assessment

> 3 Months Old



Most fevers are viral & not dangerous.

Comfort over Cure.



Note: Does NOT prevent febrile convulsions.

< 3 Months Old

High Risk: Serious Bacterial Infection.

Requires careful assessment.

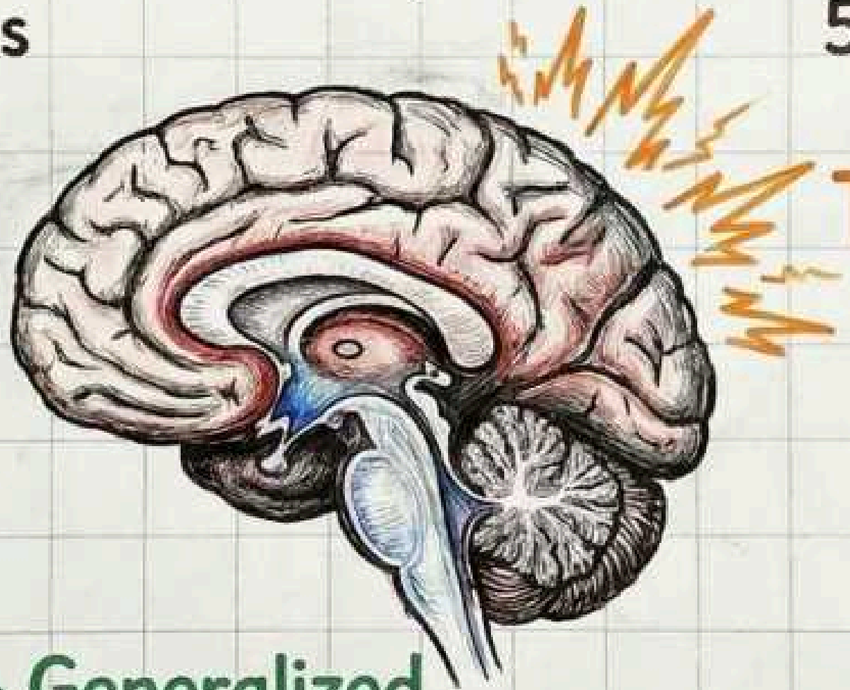
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¶3.5

Febrile Convulsions

(Affects a few in 100 children)





Triggered by fever.

1. Brief & Generalized.
2. No Brain Damage.
3. No Long-Term Effects (Despite being frightening for parents).

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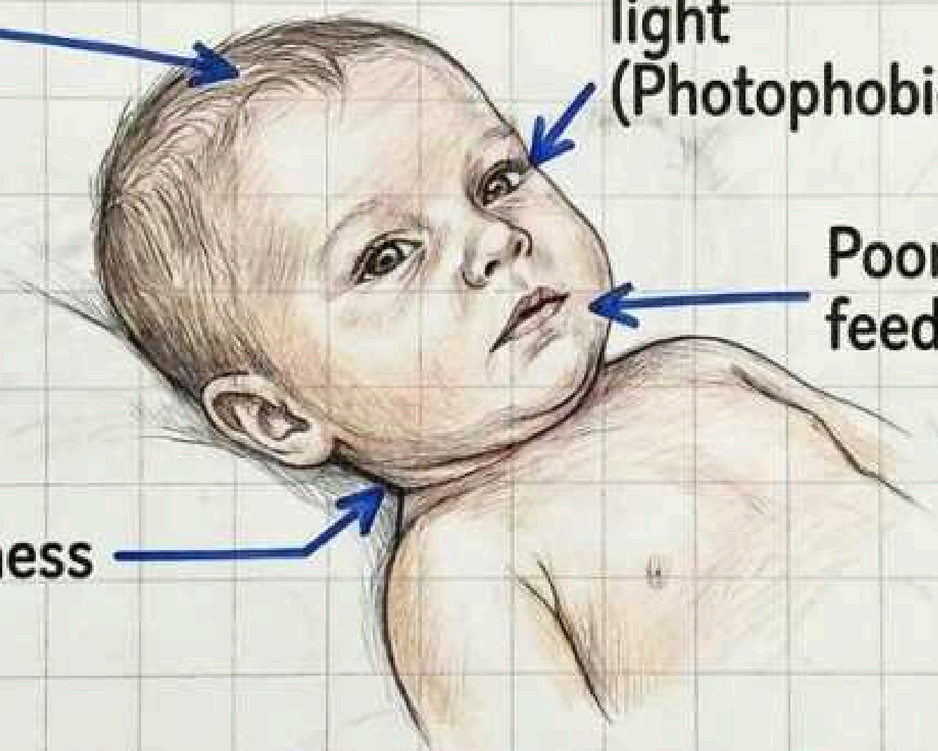
Meningitis & Meningococcal Sepsis

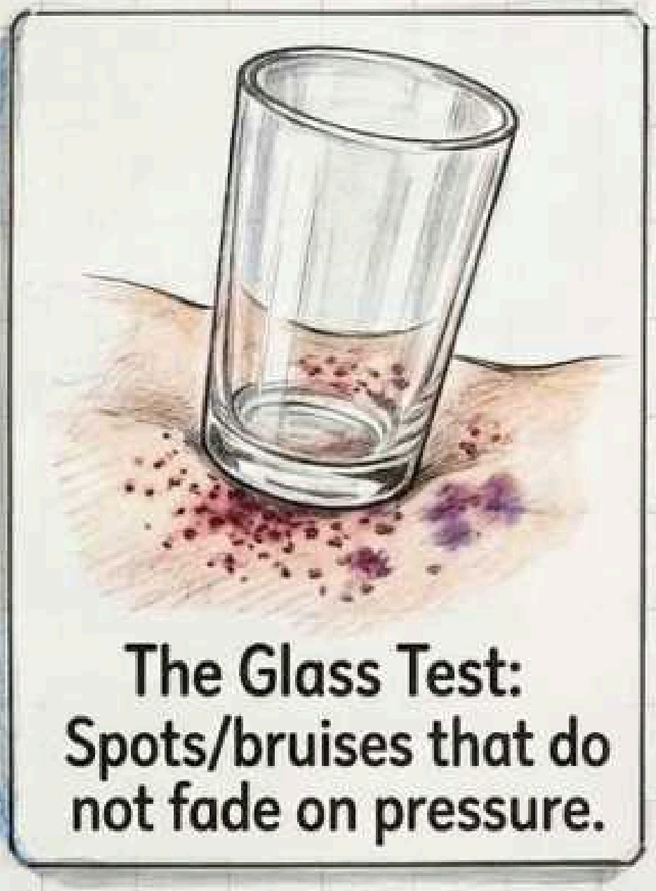
Bulging soft spot (fontanelle)
/ Drowsiness
/ Headache
/ Irritability

Dislike of bright light (Photophobia)

Poor feeding

Neck stiffness





The Glass Test:
Spots/bruises that do not fade on pressure.

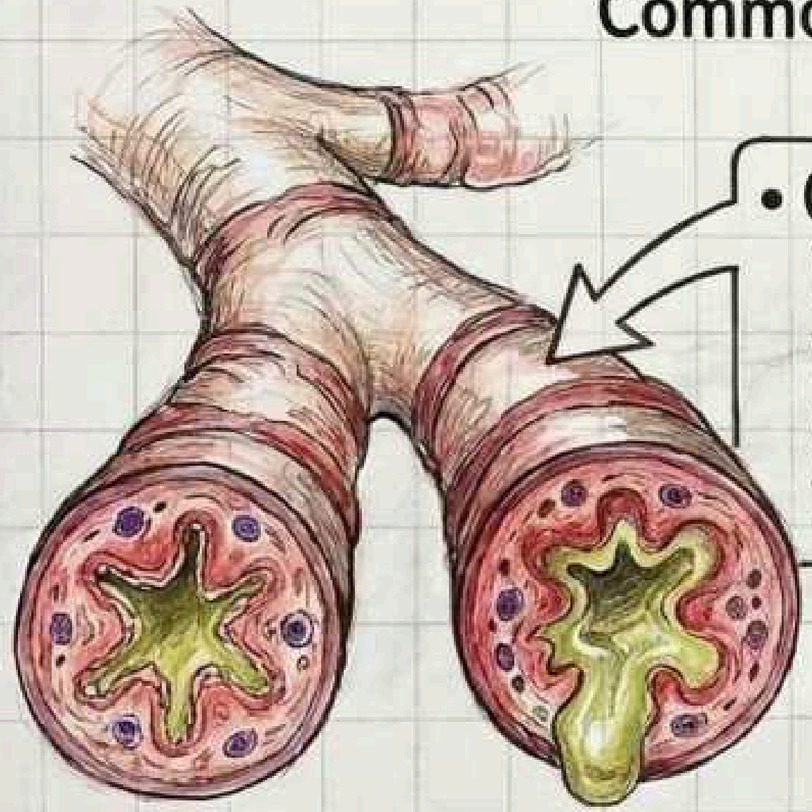
Immediote Antibiotics Save Lives.

Vaccines have greatly reduced these infections.

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Bronchiolitis (RSV)

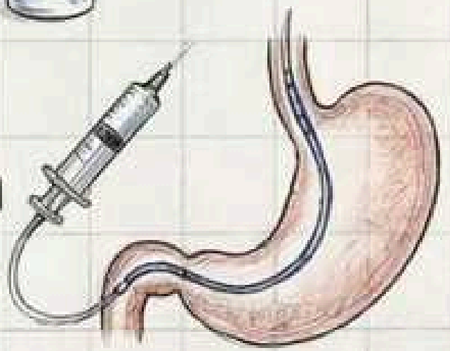
Commonest winter infant admission.



- Cough, fast breathing, wheeze, difficulty feeding.



Oxygen support



Help with feeding

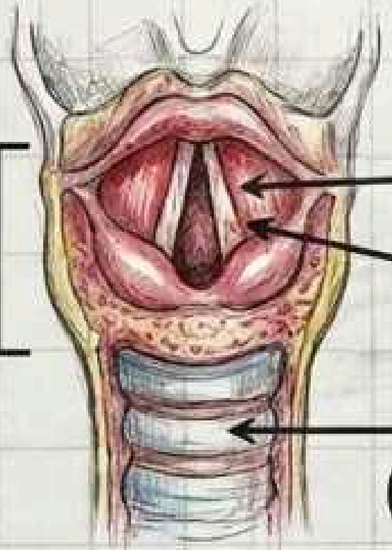
Drugs like bronchodilators & steroids do not help.
Protection via newer antibodies and maternal vaccines in pregnancy.

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¶ 3.8

Respiratory Contrast: Croup vs. Asthma

Croup

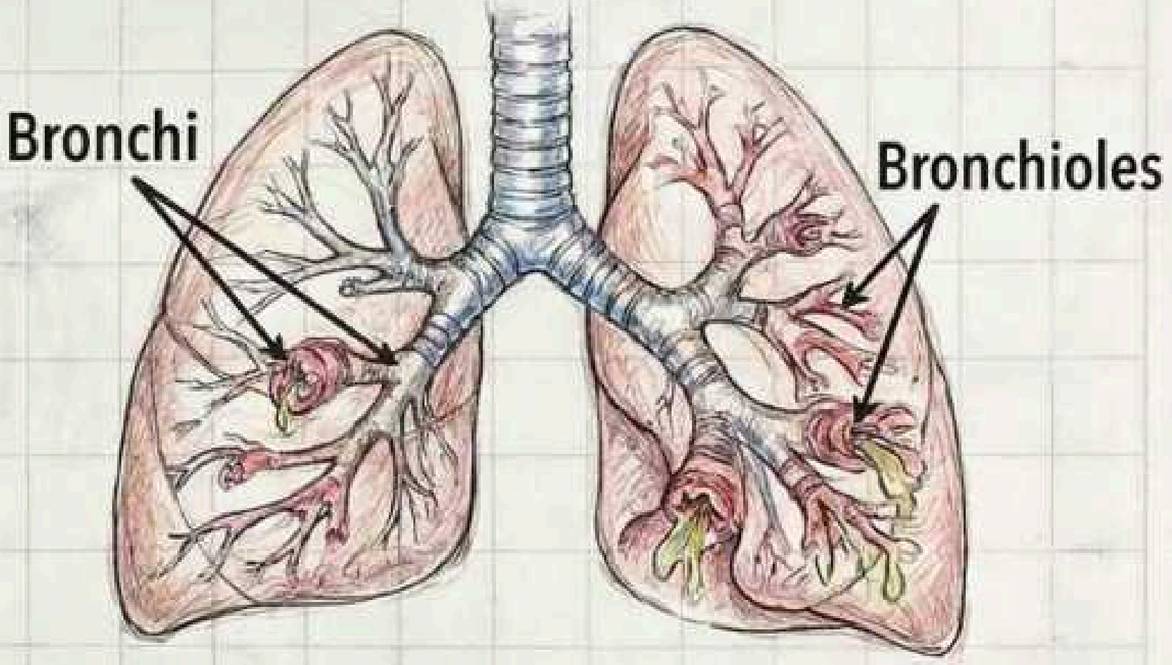


Pathology: Viral infection.

Symptoms: Barking cough, hoarse voice, stridor (harsh noise on breathing in, often at night).

Treatment: Single dose of oral steroid.

Asthma (Ref: Med 522 B)



Pathology: Common chronic condition.

Symptoms: Wheeze, chronic presentation.

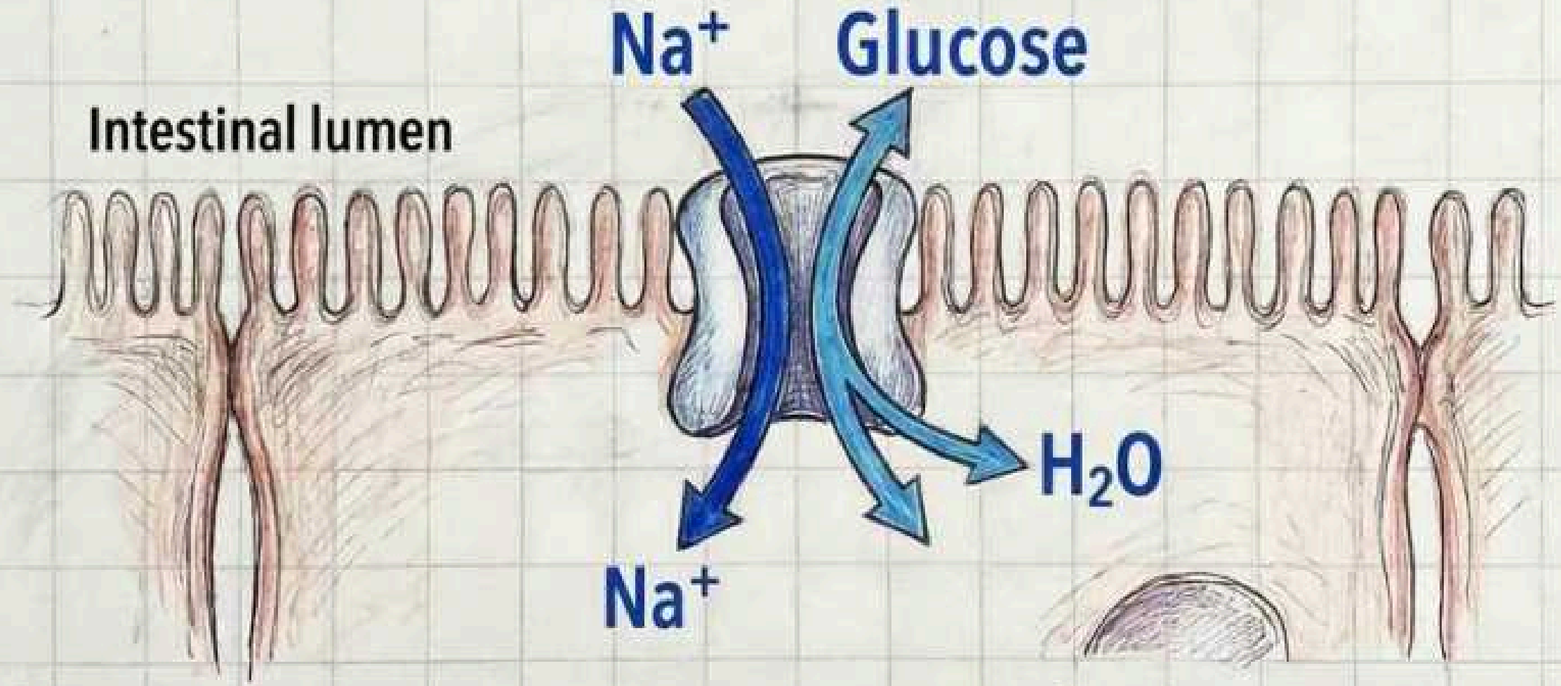
Treatment: Bronchodilators & steroids for acute attacks.

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¶ 3.9

Gastroenteritis & The ORS Revolution

Na^+ + Glucose + H_2O = Millions of Lives Saved

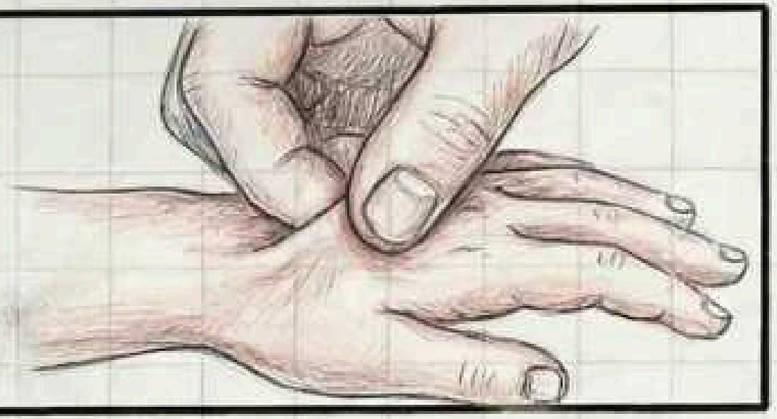


- Usually viral (vomiting/diarrhoea). Leading cause of global child death via dehydration.
- ORS introduced in 1970s: One of the 20th century's most important medical advances.
- Rotavirus vaccines have greatly reduced severe infant cases.

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Dehydration Diagnostics

Assessment: Alertness, Eyes, Mouth, Urine Output, Heart Rate



Most Children

Severe Deficit

PO (By Mouth)

Given in small amounts, frequently.

IV (Intravenous)

Fluids directly into a vein.

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¶ 3.11

Pediatric Resuscitation

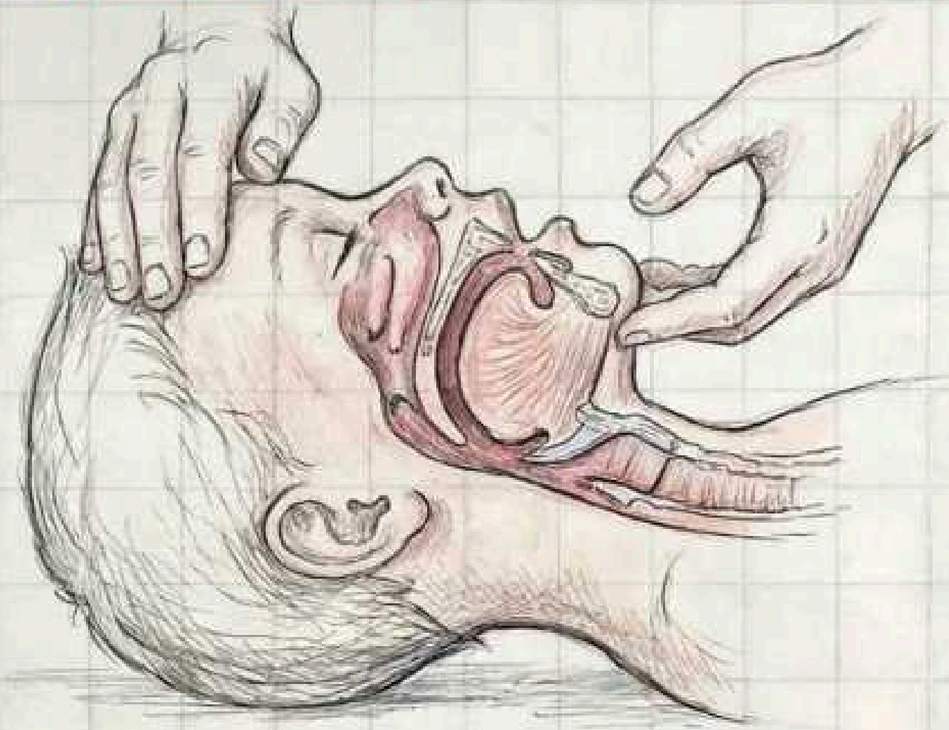
Respiratory Distress / Shock

↓ If untreated

Failure of Breathing / Circulation

↓ Rather than primary heart problem

Cardiac Arrest



Open the Airway & Give Rescue Breaths Early.

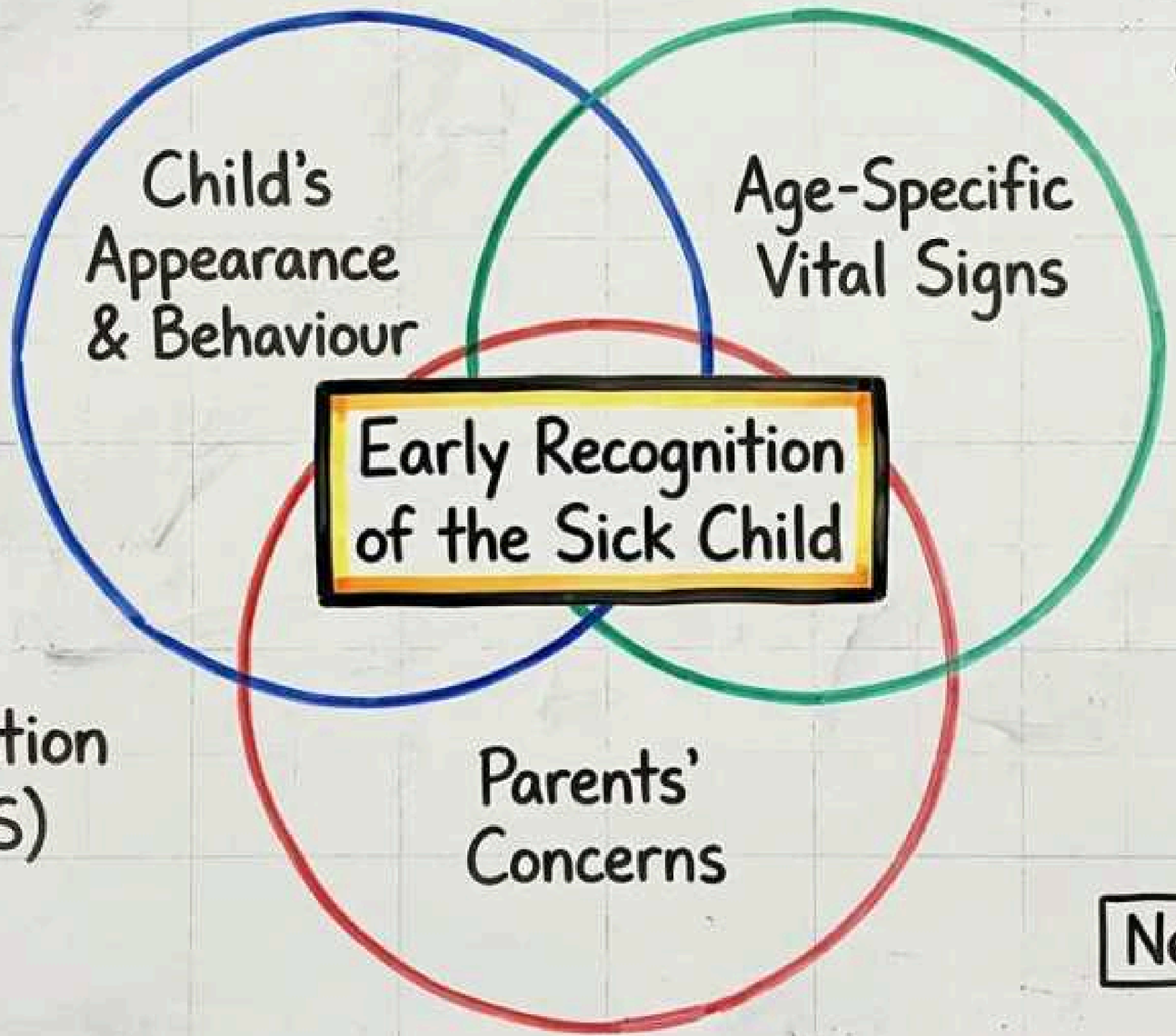
Early recognition prevents most arrests.

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Lecture Synthesis

- Most fever is viral.

- Meningitis and sepsis must NEVER be missed.



- Oral Rehydration Solution (ORS) saves lives.

Next: Infections & Immunisation

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