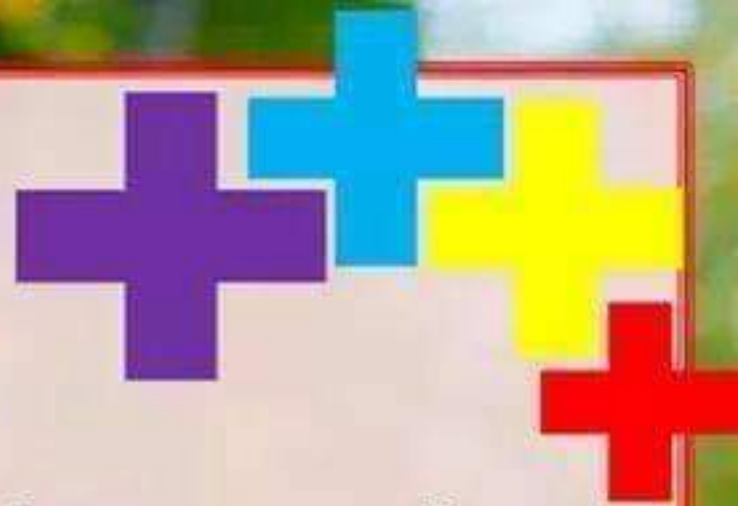




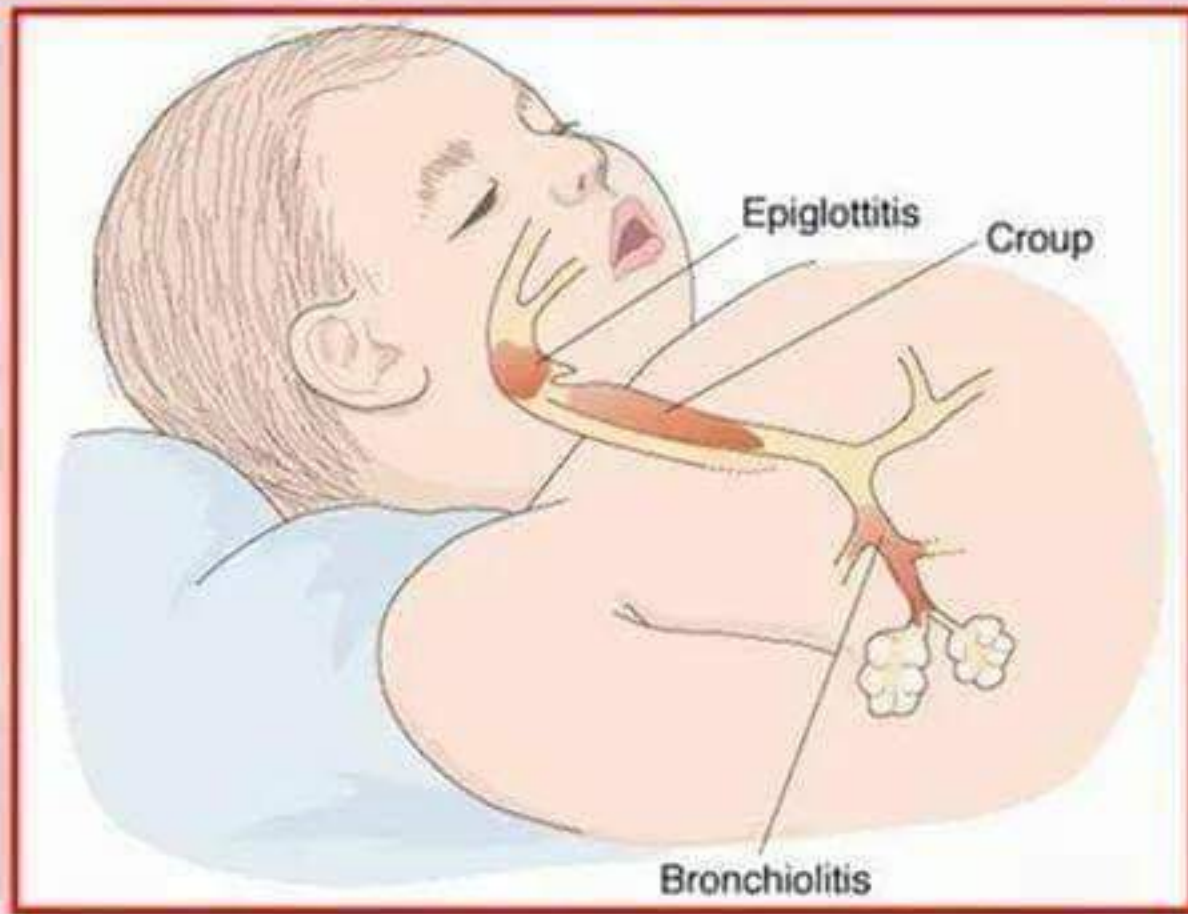
Notes In Pediatrics

Croup



Croup is a syndrome that includes spasmodic croup (recurrent croup), **laryngotracheitis** (viral croup), **laryngotracheobronchitis**, and **laryngotracheobronchopneumonitis**.

however, recurrent and viral croup account for most cases.



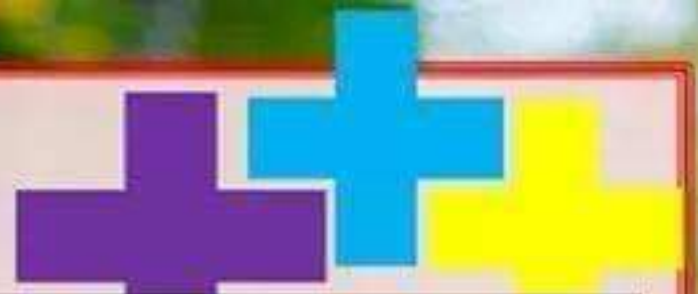
laryngotracheobronchitis

Epidemiology :

- ❖ More common in boys.
- ❖ Age 6 - 36 months.
- ❖ Peaks second year of life.
- ❖ Fall season.
- ❖ It has been reported occasionally in adolescents and rarely in adults.



Etiology:



ETIOLOGY	FREQUENCY	SEVERITY	PEAK INCIDENCE
Parainfluenza virus types 1 to 3 (type 1 is most common)	Frequent 50 to 75 percent	Variable (usually severe with type 3 virus)	Winter and spring
Enterovirus	Occasional to frequent	Usually mild	Fall
Human bocavirus	Occasional to frequent	Usually mild	Spring and fall
Influenza A and B viruses	Occasional to frequent	Variable (severe with influenza A virus)	Winter
Respiratory syncytial virus	Occasional to frequent	Mild to moderate	Winter
Rhinovirus	Occasional to frequent	Usually mild	Fall
Adenovirus	Occasional	Mild to moderate	Winter
Measles	Rare	Moderate to severe	During measles epidemics

Etiology con.



- **Measles** has been reported **rarely** in patients with croup where the population is inadequately vaccinated.
 - Bacterial causes are also rare and include **diphtheria** and ***Mycoplasma pneumoniae***.
 - **Allergic factors** may play a role in recurrent croup, with the child becoming sensitized to viral antigens.
 - Another cause of **recurrent croup** is **gastroesophageal reflux**.
- An uncontrolled study of 47 patients with recurrent croup found that treatment of reflux improved respiratory symptoms.

Clinical Course and Presentation :

Viral croup symptoms usually start like an upper respiratory tract infection

- low-grade fever.**
 - coryza**
 - barking cough**
 - various degrees of respiratory distress.**
- (nasal flaring, respiratory retractions, stridor).**

ACUTE LARYNGOTRACHEOBRONCHITIS

LTB (CROUP)

- SLOW ONSET
- BARKING COUGH
- "CROWING SOUNDS"



- AGE 3 MONTHS TO 3 YEARS

- U.R.I.'s FREQUENTLY PRECEDE LTB

- RESTLESSNESS

- INSPIRATORY STRIDOR

- RETRACTIONS

- OCCURS AT NIGHT

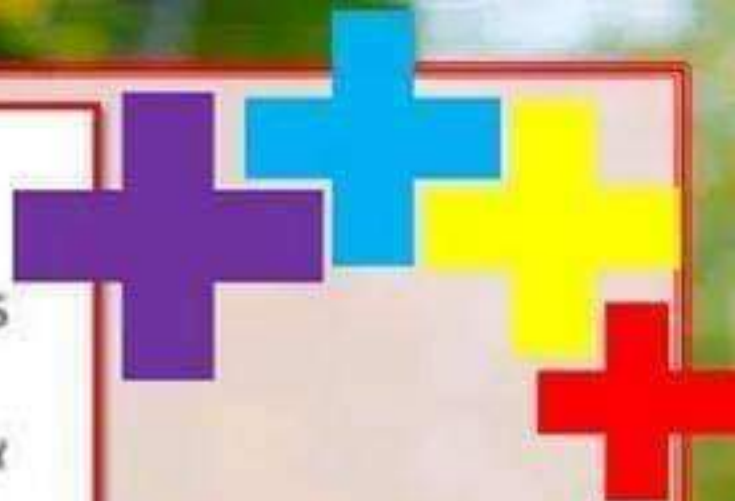
- ↑ IN FALL AND WINTER

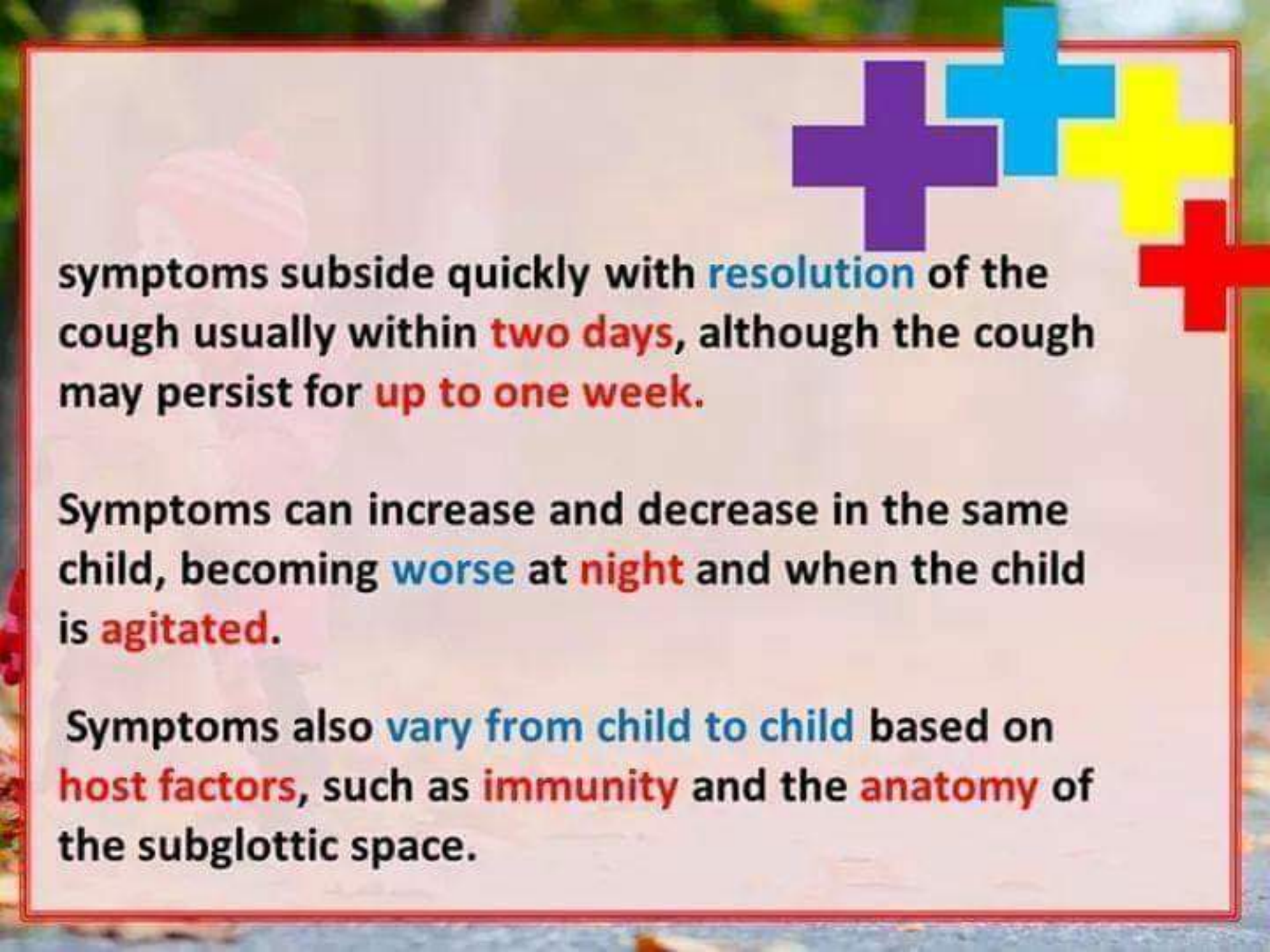
- MAY PROGRESS TO HYPOXIC STATE

- MAY HAVE SLIGHT TEMPERATURE (102°)



Medical Whispers
2012





symptoms subside quickly with **resolution** of the cough usually within **two days**, although the cough may persist for **up to one week**.

Symptoms can increase and decrease in the same child, becoming **worse** at **night** and when the child is **agitated**.

Symptoms also **vary from child to child** based on **host factors**, such as **immunity** and the **anatomy** of the subglottic space.

Croup is a benign condition with a low mortality rate.

Symptoms are **NOT** croup:

- high-grade fever
- toxic appearance;
- expiratory wheezing,
- drooling,
- voice loss,
- difficulty swallowing.
- Croup rarely occurs in children younger than three months.

Many children with croup may come to the emergency department because **symptoms begin abruptly**, causing parental concern.





Studies of children presenting to the emergency department with croup symptoms showed that 85 percent had mild croup, and only 1 to 8 percent needed hospital admission.

Less than 3 percent of children with croup who were admitted to the hospital were intubated.