

Croup (Laryngotracheobronchitis)

Croup is a general term that describes a group of conditions characterized by edema and inflammation of the upper airway. The focus of this Picmonic is on the most common croup disorder - laryngotracheobronchitis, often abbreviated as LTB, which often leads to hospitalization. The other group disorders are acute epiglottitis, acute spasmodic laryngitis, and acute tracheitis.



PLAY PICMONIC

Mechanism

Parainfluenza Virus

Parachuting-flute Virus

This is the most common cause of croup, but inflammation of these airways is also caused by adenovirus, RSV, influenza A&B, and mycoplasma pneumoniae.

Assessment

3 Months to 3 Years

(3) Tree Month-moon to (3) Tree Year-calendar

The age of onset of this disorder is after 3 months of age but usually before 3 years.

Nighttime

Night-sky

Symptoms usually present with a sudden onset and at night.

Barking Seal Cough

Seal with Coughing Coffee-pot

Croup is classically identified by a loud seal-like barking cough due to inflammation of all of the airways.

Inspiratory Stridor

Inspiring Spider

Constriction of the airways due to inflammation causes decreased airway diameter. This causes a loud high pitched inspiratory stridor. Children without stridor are often treated at home.

Interventions

Cool Humidified Air

Cold Air from Humidifier

Treatments are aimed at decreasing inflammation and cool humidified air has long been used as a treatment, although its effectiveness has not been completely scientifically documented.

Dexamethasone

Desk-moth

Steroid medications like dexamethasone are given to decrease inflammatory processes of tissues in the body as treatments are aimed to decrease inflammation.

Racemic Epinephrine

Race-car Epi-pen

A specialized type of epinephrine named for its chemical properties is given in an aerosolized form. This medication is indicated for stridor or airway constriction due to inflammation, except epiglottitis.