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Laryngitis and epiglottitis in children

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Learning objectives

- Student will learn how to identify and distinguish both diagnoses.
- Student will learn basic differences between both diagnoses.
- Student will learn basic principles of the first aid in both disorders.

Laryngitis

- full name: acute subglottic laryngitis
- typical diagnosis of the childhood
- typical seasonal incidence (october-march)
- typical daytime of onset (at night)
- most frequent between 2nd and 5th year of life (but also in younger/older children)
- **viral disease**

Laryngitis – how does it look like?

- etiology: parainfluenza/influenza virus, RS virus, rhinovirus, coronavirus 😊
- frequent signs of mild respiratory infection (runny nose, common cold) before the onset of symptoms
- onset is fast, often at night
- typical sign is hoarse, non-productive „barky“ cough, frequently with wheezing inspiration (inspiratory stridor)
- child is able to swallow, usually is restless, crying

Laryngitis – how does it look like?

- <https://youtu.be/Qbn1Zw5CTbA>
- video shows typical „barking“ cough and inspiratory stridor

Laryngitis – signs/symptoms

- cough and dyspnea does not change with the position
- fever is not typical, but lightly elevated temperature possible
- more severe forms show retraction of soft tissues on the neck and chest
- with discomfort and crying the cough gets worse with more severe dyspnea, global state of the patient can get much worse very quickly, even if relatively OK on the beginning

Laryngitis - treatment

- examine the child as calm as possible, ideally in the arms of the parent
- try your best to minimise invasive, uncomfortable and painful procedures (e.g. intravenous access)
- first line treatment: **cold air** (open window, open refrigerator)
- other possibilities: corticosteroids, e.g. dexamethason (peroral or rectal as suppository), usually available at home, when child has repeated attacks
- prognosis: very good, but frequent relapse

Epiglottitis

- full name: acute epiglottitis
- inflammation of the epiglottis
- most frequent in preschool and school age
- no seasonal incidence
- no typical daytime of onset
- relatively rare after implementation of mandatory vaccination against *Haemophilus influenzae* in 2001 (beware of „anti-vaxers“)
- **bacterial disease**

Epiglottitis – how does it look like?

- etiology: Haemophilus influenzae type B
- acute, rapid bacterial inflammation of the epiglottis with massive edema
- typical sign is severe throat pain and trouble swallowing – saliva leaking from the mouth of the child
- child is abnormally calm, even lethargic, no crying and no cough

Epiglottitis – signs/symptoms

- typical relief position: sitting and resting on hands
- typical high fever more than 39 °C, commonly with shivers and exhaustion
- global state of the child gets dramatically worse when lying down, child usually starts to suffocate in this position
- never lay down the child on its back !!

Epiglottitis - treatment

- if any suspicion, immediately transport the child to nearest hospital
- do not manipulate with the child, do not administer any medicine, do your examination as minimal as possible
- it is essential to transport the child always in sitting position (suffocation imminent)
- prognosis: serious, life threatening situation

Learning outcomes

- Student knows the difference between the two diseases.
- Student is able to reliably distinguish both diseases in the terms of the first aid.
- Student is able to provide the first aid for both diagnoses.

References

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