Acute epiglottitis

Acute epiglottitis (MKN-10: J05.1) is a life-threatening swelling of the epiglottis and septicemia caused by Haemophilus influenzae type B. It most commonly affects children aged 1-6 years.[1]

The introduction of vaccination against *Haemophilus influenzae type b* into the routine calendar has virtually eliminated it.[2]

Pathogenesis

Upper airway obstruction occurs by covering part or all of the laryngeal entrance with an epiglottis magnified several times. The cause is the rapidly advancing phlegmon epiglottis. A significant predisposition to these invasive microbes is the reduced ability to produce IgG 2 (protection against invasive encapsulated bacteria), which is physiological at this age.[2]

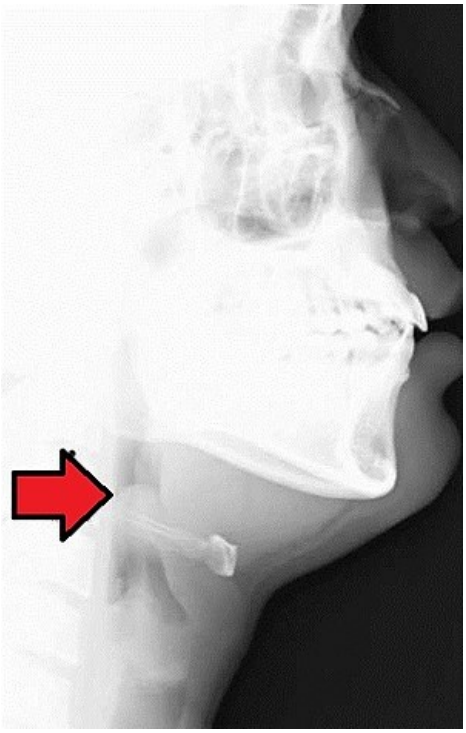
The clinical picture

Acute epiglottitis has a rapid development (in the order of hours). It starts with a sharp sore throat and difficulty swallowing, then dyspnoea appears. The child is pale, hypoxic, sitting in a forward bend, saliva flowing from his mouth because they cannot drain through the valecules along the epiglottis. The child has a fever, a quiet voice and can cough carefully, superficially.[3]

The physical finding in the lungs is poor, the progression of obstruction, ie dysphagia and dyspnoea coming within a few hours. Rarely, paratonsillar / retropharyngeal abscess, severe pablan tonsillitis may have a similar effect.[2]

Diagnosis

Accurate diagnosis is based on a good aspect of the epiglottis. We perform a gentle aspect of the pharynx after a short pressing of the tongue with a spatula. **Enlarged, reddish and soaked epiglottis**, often of bizarre shape, appears. Sometimes the epiglottis is not visible, as saliva and inflammatory secretion stagnate in the area, creating a characteristic "pond". In a typical course, the diagnosis can be made on the basis of a clinical finding, independent of the aspect of the epiglottis.



Akutní epiglotitida; laterálny pohľad, RTG

⚠

The key is to be able to readily distinguish between acute epiglottitis and laryngitis :

	Acute epiglottitis	**Acute laryngitis**[1][3]
Avarage age	3–4 years	6–36 months
The course	hours (6-24 hours)	days (2-3)
Prodromes	–	runny nose
Cough	–/meek	barking
Feeding	No	Yes
Mouth	saliva flows out	closed
Toxicity	Yes	No
Temperature	> 38,5° C	< 38,5 °C
Stridor	fine	creaking
Voice	weak / quiet	hoarse
Recurrences	No	Yes

Viditelná epiglottis u akutní epiglotitidy

Treatment

- in pre-hospital therapy, do not traumatize the child, transport it completely at rest, sitting; [2]
- endotracheal intubation;
- hospitalization in the ICU;
- blood culture collection;
- iv ATB: 2nd or 3rd generation cephalosporins (cefuroxime, ceftriaxone, cefotaxime) 7-10 days.
- rifampicin should be given as a precaution to persons who come into contact with the child's disability. [1]

Prevention

Regular vaccination against diphtheria, tetanus, whooping cough, hepatitis B virus, polio and Haemophilus influenzae type b (since 2007 as a hexavaccine).

Polyribosylribitol phosphate conjugated to tetanus or genetically modified diphtheria toxoid is used.

References

Related Articles

- Acute obstructive laryngitis
- Upper respiratory tract infection

References

1. TASKER, Robert C. – MCCLURE, Robert J. – ACERINI, Carlo L.. *Oxford Handbook od Paediatrics.* 1. edition. New York : Oxford University Press, 2008. pp. 295. ISBN 978-0-19-856573-4.
2. HAVRÁNEK, Jiří: *Infekce horních dýchacích cest*
3. KLIEGMAN, Robert M. – MARCDANTE, Karen J. – JENSON, Hal B.. *Nelson Essentials of Pediatrics.* 5th edition. Elsevier Saunders, 2006. pp. 497. ISBN 978-0-8089-2325-1.