

Bacterial tracheitis

Template:Infobox - disease This is a purulent bacterial inflammation of the trachea with a tendency to form pablum, most commonly in children aged 6 months to 12 years. The etiologies are **Staphylococcus aureus**, **Haemophilus influenzae** and **Streptococcus pneumoniae**.

The formation of pablons occurs on devastated, heavily soaked mucous membranes of the upper respiratory tract. Some authors suggest that bacterial tracheitis is actually a bacterial superinfection following viral respiratory infection (most commonly parainfluenza). Involvement of the respiratory epithelium is a sufficient predisposition to bacterial superinfection.

Clinic

Initially, patients present with a picture of upper respiratory tract infection lasting several hours to days. Gradually, **inspiratory dyspnea** develops, but usually, with bland stridor, **cough is barking to tracheal**, sore throat is inconstant, **voice is hoarse** but dysphagia is absent. At the same time, there is an onset of **alteration of the general condition** (clinically a picture of *toxic*, non-improving laryngitis). The auditory findings are poor, bronchitic phenomena can be found.

Clinically, the disease most closely resembles acute laryngotracheobronchitis, but the onset of bacterial tracheitis is not as abrupt as in subglottic laryngitis, alteration of the general condition is usually present, the fever is usually higher. Furthermore, there is no association with the season of acute viral respiratory disease and there is a poor response to adrenaline and corticosteroid therapy.

Therapy

Because of severe upper airway obstruction and alteration of general condition, we almost always resort to **intubation and UPV**. After intubation, we immediately collect samples for the microbiological examination of tracheal secretions. On **bronchoscopy**, we find normal supraglottic structures, subglottic edema and purulent secretions in the trachea. As part of a comprehensive diagnostic workup, we perform a **chest X-ray** to exclude infection at other airway sites (pneumonia) and to verify the position of the tracheal tube.

In addition to UPV, we administer general **antibiotics** - potentiated aminopenicillins or cephalosporins of the third generation, steroids have a questionable effect.

Complications

The most common complication of bacterial tracheitis is pneumonia, followed by sepsis and ARDS.

Differential diagnosis

disease/symptoms	! Acute laryngitis	Bacterial tracheitis	! Acute epiglottitis	
position of the child	doesn't affect choking	doesn't affect choking	child is choking lying down, resists laying down, wants to sit in front	
nature of breathing	strenuous, retracting the soft parts of the chest	inspiratory dyspnoea, but with a mostly insignificant stridor	cautious, superficial, the child is concentrating on "good" breathing	
swallowing	good	generally good	poor, not even swallowing saliva, which may therefore leak out of the mouth	
body temperature	usually subfebrile	febrile	febrile	febrile
cough	dry, laryngeal	dry, laryngeal	not, the child is "afraid" to cough because of the sore throat	
stridor	inspiratory	inspiratory	bubbling, slurping sound of accumulated mucus in both inspiration and expiration	
occurrence	seasonal occurrence	any time of the year	any time of the year	
onset and course	sudden onset, usually at night, worsening within tens of minutes	gradual development of dyspnoea	onset anytime within 24 hours, worsening within hours	
reaction to corticosteroids and adrenaline	symptoms recede within tens of minutes	no effect	no effect	
sore throat	Not	usually not	significant	
objective throat finding	catarrhal inflammation, epiglottis slender, little secretion	normal, or catarrhal finding	swollen, red epiglottis and accumulated mucus - "pond"	
age	3 months to 5 years	6 months to 12 years	2 to 7 years	

Links

Related articles

- Respiratory Infection Agents
- Staphylococcus aureus
- Haemophilus influenzae
- Streptococcus pneumoniae

Source

- HAVRÁNEK, Jiří: *Infekce horních dýchacích cest.*