

Acute Laryngitis in Children

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Introduction

Acute laryngitis is a prevalent condition in children and holds a significant place among respiratory tract illnesses. This illness is primarily characterized by inflammation of the vocal cords and the mucous membrane of the larynx (voice box). Key signs of acute laryngitis include the development of a barking cough, changes in voice (particularly hoarseness), and difficulty breathing. In many cases, this condition develops in children against the backdrop of a viral infection, though other factors can also contribute to the onset of the disease.

Laryngitis can pose a significant risk, especially in children, due to their relatively narrow larynx, which can become further constricted during the inflammatory process. This can lead to difficulty breathing and, in some cases, respiratory failure. Therefore, the timely identification, accurate diagnosis, and treatment of acute laryngitis are crucial for safeguarding a child's health.

Acute laryngitis in children is most often seen in the age range of 2 to 6 years, as their immune systems are not yet fully developed and the laryngeal mucous membrane is more prone to inflammation. A common cause of the disease is respiratory viral infections (influenza, parainfluenza, adenovirus). In addition, inhaled irritants, cigarette smoke, allergic reactions, or excessive strain on the vocal cords can also lead to this condition. Acute laryngitis affects not only a child's physical health but also their psychological state. For example, breathing difficulties or a barking cough can trigger fear in a child. Therefore, parents and medical professionals need to take immediate action as soon as the first signs of laryngitis appear in a child. This study will comprehensively explore the causes of acute laryngitis in children, the clinical presentation of the disease, diagnostic methods, and treatment approaches. It will also provide effective recommendations for its prevention. By increasing knowledge related to acute laryngitis in children and developing preventive measures, it is possible to reduce the spread of the disease.

Main Section

1. What Causes Acute Laryngitis?

Most of the time, acute laryngitis is caused by viruses. Here are the most common ones:

- **Respiratory Viruses:** Things like the flu, parainfluenza, rhinovirus, adenoviruses, and RSV – those are all common reasons why kids get acute laryngitis. These viruses make the lining of the voice box swell up. When that happens, it makes the breathing tubes narrower, and kids have trouble getting enough air.
- **Bacteria:** Less often, bacteria can also cause laryngitis, especially types like *Streptococcus* and *Staphylococcus*. Sometimes, bacterial laryngitis can happen after a kid has already had a viral infection.

- **Allergies:** Allergies can also be a trigger. Things like certain foods, different chemicals, or stuff in the air (like cigarette smoke or not having enough fresh air) can all cause laryngitis in kids.
- **Mechanical Stuff:** Sometimes, it's just because a kid is overusing their voice. Yelling a lot, being in a noisy place, or even just coughing a lot can make the vocal cords swell up.

2. What Does Acute Laryngitis Look Like?

Sometimes, it's hard to tell if a kid has laryngitis because it can look like other breathing problems. But here are the main symptoms to watch out for:

- **Hoarseness and Voice Changes:** When a kid has laryngitis, their voice will get raspy or hoarse. Sometimes, they can lose their voice completely.
- **Trouble Breathing:** It can become hard for kids to breathe. You might hear a wheezing sound or see them look like they're struggling and worried.
- **Fever:** Often, kids with laryngitis will run a fever, usually pretty high, around 100-102 degrees Fahrenheit (or 38-39 degrees Celsius).
- **Stridor (Noisy Chest Breathing):** This is a whistling sound that comes from the upper breathing tubes getting narrow. You'll mostly hear it during the day, but especially when they're trying to rest.
- **Barking Cough:** Kids with laryngitis will often have a loud, barking cough.
- **Feeling Really Tired and Anxious:** Kids can get really tired and anxious because it's hard to breathe. They might start to avoid running around and playing because they're so tired.

3. Diagnosis

To figure out if a child has acute laryngitis, doctors use a few different methods:

- **Clinical Assessment:** This is when the doctor gathers information by looking at things like the child's temperature, if they have a barking cough, changes in their voice, and how much trouble they're having breathing. They'll basically get a complete picture of what's going on by noting all the symptoms.
- **Laryngoscopy:** Sometimes, to get a better look, the doctor might use a laryngoscope. This is a tool that lets them see what's happening in the breathing tube and how much inflammation is there.
- **Viral and Bacterial Testing:** To find out if it's a virus or bacteria causing the problem (and what type it is), they'll do some tests. This might include blood tests, taking swabs, or doing cultures.

4. Treatment

Most of the time, treating acute laryngitis is about managing the symptoms and fighting the infection. Here are the main ways they do that:

- **Antiviral Therapy:** If the problem is a virus, they'll use antiviral medications. This can often help stop the infection from spreading further into the upper airways.
- **Antibacterial Medications:** If it turns out to be a bacterial infection, they'll prescribe antibiotics. Bacterial laryngitis can sometimes mean the breathing tube is swollen shut.
- **Hypothermic and Halogen Therapy:** This includes treatment that helps with minerals and vitamins.
- **Hydration and Respiratory Care:** This includes things to help clear up the airways, making sure the child is drinking plenty of fluids (hydration), and using medical breathing treatments.

- **Psychological Support:** Kids can get really stressed when they have voice problems or trouble breathing. They might need some extra support from a psychologist to help them through it.

5. Prevention

Taking steps to prevent acute laryngitis is really important. Keeping kids' immune systems strong, following good hygiene rules, and staying away from harmful things (like cigarette smoke) will help them stay healthy. It's also important to get vaccines against viruses and bacteria, and to take measures to stop infections from spreading.

Conclusion

Acute laryngitis is a common respiratory illness in children. It's mainly caused by viruses, which can seriously harm a child's breathing passages. Viral infections, bacterial illnesses, allergic reactions, and mechanical injuries can all lead to laryngitis in children. Laryngitis shows up in kids with symptoms like changes in voice, a barking cough, trouble breathing, and high fever. To diagnose acute laryngitis, doctors need to use clinical assessments, laryngoscopy, and viral and bacterial tests. Treatments include antiviral medications, antibiotics, hypothermic therapy, and hydration. To prevent this illness, it's crucial to strengthen a child's immune system, follow good hygiene practices, and stay away from harmful substances. Furthermore, it's important to use both educational and medical measures to prevent acute laryngitis in kids. Children need to be taught how to avoid viral and bacterial infections, particularly by following sanitation and epidemiological guidelines at school. Also, it's important to ensure the child's voice and breathing passages don't close up and are restored with the right treatments. In any case, it's critical to identify and treat the symptoms of acute laryngitis in children quickly, to protect their health. A good understanding of how to prevent and treat this illness is important to ensure kids are healthy and developing properly.

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