

## What's on the Internet?

### Professional Sites

Recurrent Respiratory Papilloma  
Foundation at:

[www.rrpf.org](http://www.rrpf.org)

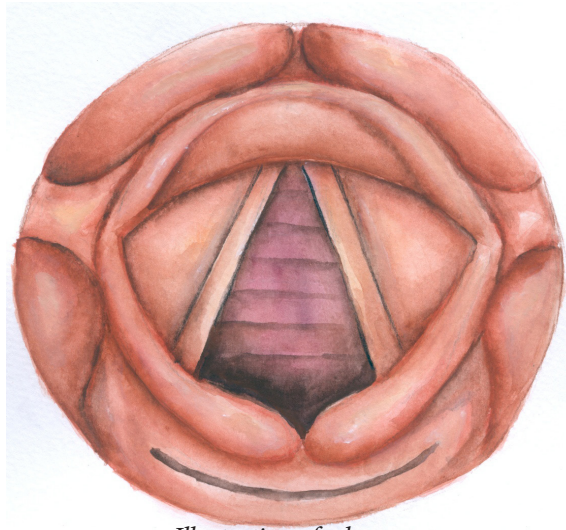
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Lawrenceville, NJ. 08648-5557

e-mail: [bills@rrpf.org](mailto:bills@rrpf.org)

### RRP Sites for Children

[www.rrpf.org/kid-zone](http://www.rrpf.org/kid-zone)

This site is designed for children of all ages. Including frequently asked questions and some personal RRP stories.



*Illustration of a larynx*

## Support

The RRPF e-mail Listserve. Which is a private confidential list serve for the exclusive personal, professional and community use of patients, family members, researchers, medical and human service professionals and others who have an interest in RRP.

To subscribe, simply send a blank e-mail to  
[RRPF-subscribe@yahogroups.com](mailto:RRPF-subscribe@yahogroups.com)

An archive of all issues of the RRP Newsletter  
is available at

[www.rrpf.org/newsletter](http://www.rrpf.org/newsletter)

For Regional Support Network

[www.rrpf.org/contact](http://www.rrpf.org/contact)

An educational RRP video is available at  
<http://www.youtube.com/watch?v=6M0dWHIQJZc>

# Recurrent Respiratory Papillomatosis

What is RRP?

What are the symptoms?

Is there a cure?

What treatments are available?

Is there a support group?

What's on the Internet?



## What is RRP?

Recurrent Respiratory Papillomatosis (RRP) is a disease in which tumors grow inside the larynx, vocal cords and trachea. It affects both children and adults. Research has determined that the Human Papilloma Virus (HPV) is present in these respiratory tumors. These growths are often associated with two specific types of the virus (HPV6 and HPV11) which are also found in genital and cervical warts.

## Is there a cure?

There is no known cure for RRP, with CO2 laser surgery under general anesthesia being the accepted method of controlling these growths. If left untreated these respiratory tumors will continue to grow, blocking the patient's airway with suffocation being the likely result

## What are the symptoms?

Patients experience hoarseness as one of their first symptoms. Another frequent complaint in young children is stridor, i.e., particularly stressed breathing on inhaling when sleeping their back at night. Other less frequent symptoms are dyspnea (shortness of breath), chronic cough, and recurrent pneumonia. The symptoms can result in RRP being mistakenly attributed to asthma, croup, chronic tonsillitis, or allergies.

## What treatments are available?

### Surgery

Is the most commonly used treatment for RRP. Often a laser is used to remove the papilloma. It is a means of controlling the disease, but is generally not considered a way to "cure" RRP.

#### Some surgical instruments used for RRP:

- Carbon Dioxide (CO2) laser
- Microdebrider
- KTP / Pulse Dye Laser
- Cold steel

### I3C / DIM

Indole-3-carbinol (I3C) and its main breakdown by product Diindolymethane (DIM) - nutritional supplement that is found naturally in cruciferous vegetables which includes cabbage, brussels sprouts, broccoli, and cauliflower. It is more readily available in therapeutic doses in the chemically equivalent encapsulated form.

### Cidofovir

Cidofovir is an anti-viral drug that is being used experimentally to treat RRP via intralésional injections during surgery. Because of possible side effects it is most appropriate for moderate to severe cases of RRP.

### Interferon

Interferon therapy for RRP is typically via subcutaneous injections. They help control RRP by targeting the virus and stimulating a host-immune response.

### MMR/Mumps Vaccine

Dr. Nigel Pashley first started treating RRP patients with the mumps vaccine in the 1980s and then switched to the MMR vaccine. It seems to trigger a local inflammatory response that allows the immune system to control papilloma growth.

### Avastin

An approach to remove and inhibit future growth of laryngeal papillomas was recently developed by Dr. Steven Zeitels at Mass General Hospital Voice Center. It involves the use of the angiolytic pulsed-KTP laser coupled with the local injection of the drug Avastin, which inhibits the growth of blood vessels in tumors.

### Celebrex

Celebrex (a COX-2 inhibitor), which has been shown to be effective in treating some types of benign tumors, is now being tested as adjunct approach to inhibit the growth of respiratory papillomas. This research was initiated at Long Island Jewish Hospital, Department of Otolaryngology

*More information about these and other new treatments can be found at the RRP Foundation website:*

[www.rrpf.org](http://www.rrpf.org)

[www.rrpf.org/newsletter](http://www.rrpf.org/newsletter)

[www.rrpf.org/newsletters/RRP\\_Newsletter\\_Spring11.html#Adjunct\\_Therapy](http://www.rrpf.org/newsletters/RRP_Newsletter_Spring11.html#Adjunct_Therapy)