

# Viral Laryngeal Polyps

## *Treatment with Bioregulatory Medications*

*By Jacques Deneef, MD*

Vocal polyps are superficial benign growths on the vocal folds. They are generally unilateral and range widely in appearance, from the true pedunculated polyp to a hemorrhagic growth. There are a number of different recognized etiologies for vocal polyps, including phonotrauma (misuse of the voice, generally from a speaking or singing profession), a local hemorrhage, or a viral origin.<sup>1</sup> A *papilloma* is a type of polyp that is defined as a small benign epithelial tumor. In the respiratory tract, they commonly present as small wartlike nodules in the larynx or trachea.<sup>2,3</sup>

Papillomas are traditionally categorized into four major groups based on their morphology but not necessarily on clinical relevance. These 4 groups are as follows: multiple juvenile papillomas, solitary juvenile papillomas, multiple adult papillomas, and solitary adult papillomas.<sup>4</sup> The lesions can be markedly recurrent, with some reports of up to 150 surgical procedures during a person's lifetime.<sup>3,5</sup> Papillomas are not reactionary lesions; they have a definitive and persistent etiological agent, such as a virus. Current evidence suggests a correlation between persistent infection by human papillomavirus (HPV), especially types 6 and 11, and the development of laryngeal papillomas,<sup>6,7</sup> lending support to mainstream medicine's campaign to vaccinate all young children with the HPV vaccine. However, only 20% of persons with laryngeal papillomas have measurable levels of HPV DNA present.<sup>3,6</sup>

Vocal polyps and recurrent respiratory papillomatosis are still considered relatively rare disorders with an estimated incidence of only 1.8 and 4.3 cases per 100 000 adults and children, respectively, per year in the United States.<sup>3</sup> Laryngeal papillomatosis primarily affects infants and young children, with 60% to 80% of cases occurring before the age of 3 years. Risk factors for children include exposure to the cervix and vagina of a mother with genital HPV infections during delivery, the status of the child's immune system, and local trauma<sup>3,5</sup> (possibly from recurrent extraesophageal acid reflux<sup>8</sup>). Adult risk factors include compromised immune systems and orogenital or oroanal transmission between persons with active HPV infections.<sup>2,3</sup>

Because the tumors grow quickly, young children with the disease may find it difficult to breathe when sleeping or they may experience difficulty swallowing (dysphagia) and/or hoarseness and an abnormal cry. Adults with laryngeal papillomatosis may experience hoarseness, a change in voice quality and/or increased effort in vocalizing, chronic coughing, or breathing problems. Signs of airway obstruction, including tachypnea, stridor, use of accessory muscles of breathing, and flaring of nasal ala, also might be present.<sup>1,3</sup> Any acute onset of a marked change in vocal quality or dysphonia should alert the clinician to exclude any possible medical emergencies, such as an airway obstruction from a foreign body or

epiglottitis (possibly from a *Haemophilus influenzae* B infection). If the change in voice quality has been long-term, the most likely diagnosis is a laryngeal polyp or a flare-up of recurrent laryngeal papillomatosis. This diagnosis is confirmed by measurements in a voice laboratory and imaging studies, such as videostroboscopy.<sup>2,3</sup>

The course of the disease is unpredictable with a possibility of pulmonary spread and malignancy. For example, there is a correlation between the development of viral laryngeal polyps, head and neck carcinomas, and a chronic persistent HPV infection,<sup>9</sup> although there are some significant controversies.<sup>10</sup> Current evidence suggests that an accumulation of additional cellular changes is necessary, such as from alcohol and tobacco use, before neoplastic transformation can occur.<sup>11</sup> The long-term consumption of mycotoxins (eg, aflatoxin and fumonisin) also has recently been linked to the development of esophageal carcinomas.<sup>12</sup>

The therapy of choice is complete surgical excision of the polyp with laser vaporization or excision using the cold steel or carbon dioxide laser.<sup>13</sup> Depending on the size and type of vocal polyps, antihomotoxic medications can be useful in reducing the signs and symptoms, preventing recurrence, and supporting mainstream medical therapies. A bioregulatory protocol for the supportive treatment of vocal polyps is shown in the Table. ■

Table. Supportive Treatment for Viral Laryngeal Polyps

DET-Phase	Basic and/or Symptomatic	Regulation Therapy <sup>a</sup>	Optional
Endodermal, mucodermal	<ul style="list-style-type: none"> <li>• <b>Phosphor-Homaccord</b></li> </ul>	<b>D&amp;D</b> <ul style="list-style-type: none"> <li>• <b>Advanced supportive detoxification and drainage<sup>b</sup> with Galium-Heel</b> followed by</li> <li>• <b>Basic detoxification and drainage: Detox-Kit<sup>c</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Vomitusheel</b> (in the presence of nausea)</li> <li>• <b>Nervoheel/Neurexan</b> (if stress related)</li> <li>• <b>Cerebrum compositum</b> (in the presence of cognitive decline)</li> </ul>
Impregnation		<b>IM</b> <ul style="list-style-type: none"> <li>• <b>Engystol</b></li> </ul>	
Degeneration		<b>COS</b> <ul style="list-style-type: none"> <li>• <b>Coenzyme compositum</b></li> <li>• <b>Ubichinon compositum</b></li> <li>• <b>Mucosa compositum</b></li> </ul>	
<p><b>Note:</b> It is important to obtain a complete medical history and perform a thorough clinical workup to ensure that there is minimal risk of severe complications.</p>			
<p><b>Dosages:</b> Phosphor-Homaccord, 10 drops 3 times per day. Regulation therapy: tablets, 1 tablet 3 times per day; ampoules, 1 ampoule of each medication, 1 to 3 times per week; Detox-Kit, 30 drops of each medication in 1.5 L of water (drink throughout the day). Optional therapy: ampoules, 1 ampoule 1 to 3 times per week; drops, 10 drops 3 times per day; tablets, 1 tablet 3 times per day.</p>			

Abbreviations: COS, cell and organ support; D&D, detoxification and drainage; DET, Disease Evolution Table; IM, immunomodulation.

<sup>a</sup>Antihomotoxic regulation therapy consists of a 3-pillar approach: D&D, IM, and COS.

<sup>b</sup>Advanced supportive detoxification and drainage consists of Hepar compositum (liver), Solidago compositum (kidney), and Thyreoidea compositum (connective tissue).

<sup>c</sup>The Detox-Kit consists of Lymphomyosot, Nux vomica-Homaccord, and Berberis-Homaccord.

**References**

- Buckmire RA. Vocal polyps and nodules. eMedicine Web site. <http://emedicine.medscape.com/article/864565-overview>. Updated September 8, 2008. Accessed June 24, 2010.
- Derkay CS, Wiatrak B. Recurrent respiratory papillomatosis: a review. *Laryngoscope*. 2008;118(7):1236-1247.
- McClay JE. Recurrent respiratory papillomatosis. eMedicine Web site. <http://emedicine.medscape.com/article/865758-overview>. Updated October 29, 2008. Accessed June 24, 2010.
- Aaltonen LM, Peltomaa J, Rihkanen H. Prognostic value of clinical findings in histologically verified adult-onset laryngeal papillomas. *Eur Arch Otorhinolaryngol*. 1997;254(5):219-222.
- Stamatakis S, Nikolopoulos TP, Korres S, Felekis D, Tzangaroulakis A, Ferekidis E. Juvenile recurrent respiratory papillomatosis: still a mystery disease with difficult management. *Head Neck*. 2007;29(2):155-162.
- Major T, Szarka K, Sziklai I, Gergely L, Czeglédy J. The characteristics of human papillomavirus DNA in head and neck cancers and papillomas. *J Clin Pathol*. 2005;58(1):51-55.
- Bonnez W, Reichman RC. Papillomaviruses. In: Mandell GL, Bennett JE, Dolin R, eds. *Principles and Practice of Infectious Diseases*. 6th ed. New York, NY: Churchill Livingstone; 2005:1841-1856.
- McKenna M, Brodsky L. Extraesophageal acid reflux and recurrent respiratory papilloma in children. *Int J Pediatr Otorhinolaryngol*. 2005;69(5):597-605.
- Mannarini L, Kratochvil V, Calabrese L, et al. Human papilloma virus (HPV) in head and neck region: review of literature. *Acta Otorhinolaryngol Ital*. 2009;29(3):119-126.
- Campisi G, Giovannelli L. Controversies surrounding human papilloma virus infection, head & neck vs oral cancer, implications for prophylaxis and treatment. *Head Neck Oncol*. 2009;1(1):8.
- Smith EM, Rubenstein LM, Haugen TH, Hamsikova E, Turek LP. Tobacco and alcohol use increases the risk of both HPV-associated and HPV-independent head and neck cancers [published online ahead of print April 17, 2010]. *Cancer Causes Control*. doi:10.1007/s10552-010-9564-z.
- Williams JH, Grubb JA, Davis JW, et al. HIV and hepatocellular and esophageal carcinomas related to consumption of mycotoxin-prone foods in sub-Saharan Africa [published online ahead of print May 19, 2010]. *Am J Clin Nutr*. 2010;92(1):154-160. doi:10.3945/ajcn.2009.28761
- Goon P, Sonnex C, Jani P, Stanley M, Sudhoff H. Recurrent respiratory papillomatosis: an overview of current thinking and treatment. *Eur Arch Otorhinolaryngol*. 2008;265(2):147-151.