Laryngeal Papillomatosis

Background
Laryngeal papillomatosis is a disease in which papillomata or benign wart-like growths are develop on the laryngeal tissues due to a persistent viral infection. The most common viral strains causing laryngeal papillomatosis are HPV 6 and 11. There is a childhood or pediatric form, as well as an adult-onset form of the disease. While treatable, laryngeal papillomatosis can be challenging given its often recurrent and unpredictable rate of regrowth. There is a very small risk of transformation to cancer (3-7%).

Signs, Symptoms, and Diagnosis
Signs and symptoms vary depending on the size of the papillomata and which parts of the larynx are affected, but the most common symptom is voice change or hoarseness. Larger papillomata can sometimes cause symptoms of obstruction, such as shortness of breath. Diagnosis is made by your physician based on your symptoms and physical examination including laryngoscopy. Although papillomata have a characteristic appearance, biopsy is necessary to confirm the diagnosis.

Treatment
A variety of treatments for laryngeal papillomatosis exist, most of which involve carefully removing or destroying the diseased tissue. Techniques include the use of traditional micro-surgical instruments and laser surgery. Bulky growths tend to be managed in the operating room under general anesthesia, though certain cases might allow for awake intervention under local anesthesia. For cases that require multiple or frequent surgeries, sometimes medications such as cidofovir or bevacizumab might be applied at the discretion of your physician. Very rarely, tracheotomy might be necessary for very large papillomata that obstruct or block the airway passage. The quadrivalent HPV vaccine, which protects against some of the implicated viral strains, might ultimately lead to a reduction in the prevalence of laryngeal papillomatosis.