

Patient Information Leaflet

Recurrent respiratory papillomatosis (RRP)

Introduction

This leaflet provides information about **Recurrent Respiratory Papillomatosis (RRP)**, a condition that affects the voice box and airway. It also includes details about available treatments, including the **Gardasil-9 vaccine**, which may help prevent certain cases of RRP. If you have any further questions after reading this, please speak to your doctor or specialist nurse.

What is Recurrent Respiratory Papillomatosis (RRP)?

Recurrent Respiratory Papillomatosis is a rare condition caused by the **human papillomavirus (HPV)**, particularly **HPV types 6 and 11**. It leads to wart-like growths (papillomas) in the **larynx (voice box)**, **trachea (windpipe)**, and **sometimes the lungs**. These growths can cause **voice changes, breathing difficulties, and airway obstruction**.

Symptoms of RRP

- Hoarseness or voice changes
- Chronic cough or throat discomfort
- Stridor (noisy breathing)
- Difficulty breathing in severe cases

How is RRP Diagnosed?

A specialist will assess your symptoms and may perform a **laryngoscopy**, where a small camera is used to examine the vocal cords. A biopsy may also be taken to confirm the diagnosis.

Treatment Options for RRP

There is **no permanent cure** for RRP, but various treatments can help manage symptoms and improve quality of life.

1. Microlaryngoscopy and Debridement

Microlaryngoscopy is a surgical procedure used to remove papillomas from the vocal cords. The main techniques include:

- **Microdebrider surgery** (a precise instrument removes papillomas)
- **Laser surgery** (commonly used to target affected areas)
- **Cold instrumentation** (small tools used to excise growths)

Surgery helps improve **voice quality and breathing**, but since RRP tends to recur, multiple procedures may be needed over time.

2. Medical Therapies

- **Antiviral treatments** such as cidofovir (in some cases)
- **Immune-modulating therapies** like bevacizumab (an injection used in severe cases)

Gardasil-9 Vaccine and RRP Prevention

The **Gardasil-9 vaccine** protects against **HPV types 6 and 11**, which cause most cases of RRP. While it does not cure existing RRP, it may help **reduce recurrence rates** in some patients and prevent new infections. Further research is ongoing

What Are the Risks of RRP?

- **Recurrence:** Papillomas tend to regrow, requiring repeated treatments.
- **Airway obstruction:** In severe cases, papillomas can block the airway, requiring emergency intervention.
- **Scarring and voice changes:** Multiple surgeries may lead to vocal cord scarring, affecting voice quality.
- **Spread to lower airways:** In rare cases, papillomas can spread to the trachea or lungs, leading to serious complications.

Aftercare and Follow-up

- Regular follow-ups with an ENT specialist are essential to monitor recurrence.
- Voice therapy may help improve vocal quality.
- Avoid **smoking, shouting, and vocal strain** to protect the vocal cords.

When to Seek Medical Help

Contact your doctor if you experience:

- Worsening voice changes or hoarseness
- Difficulty breathing or noisy breathing (stridor)
- Signs of infection (fever, redness, swelling)

Further Information

If you have any concerns or need further advice, please contact your healthcare provider.