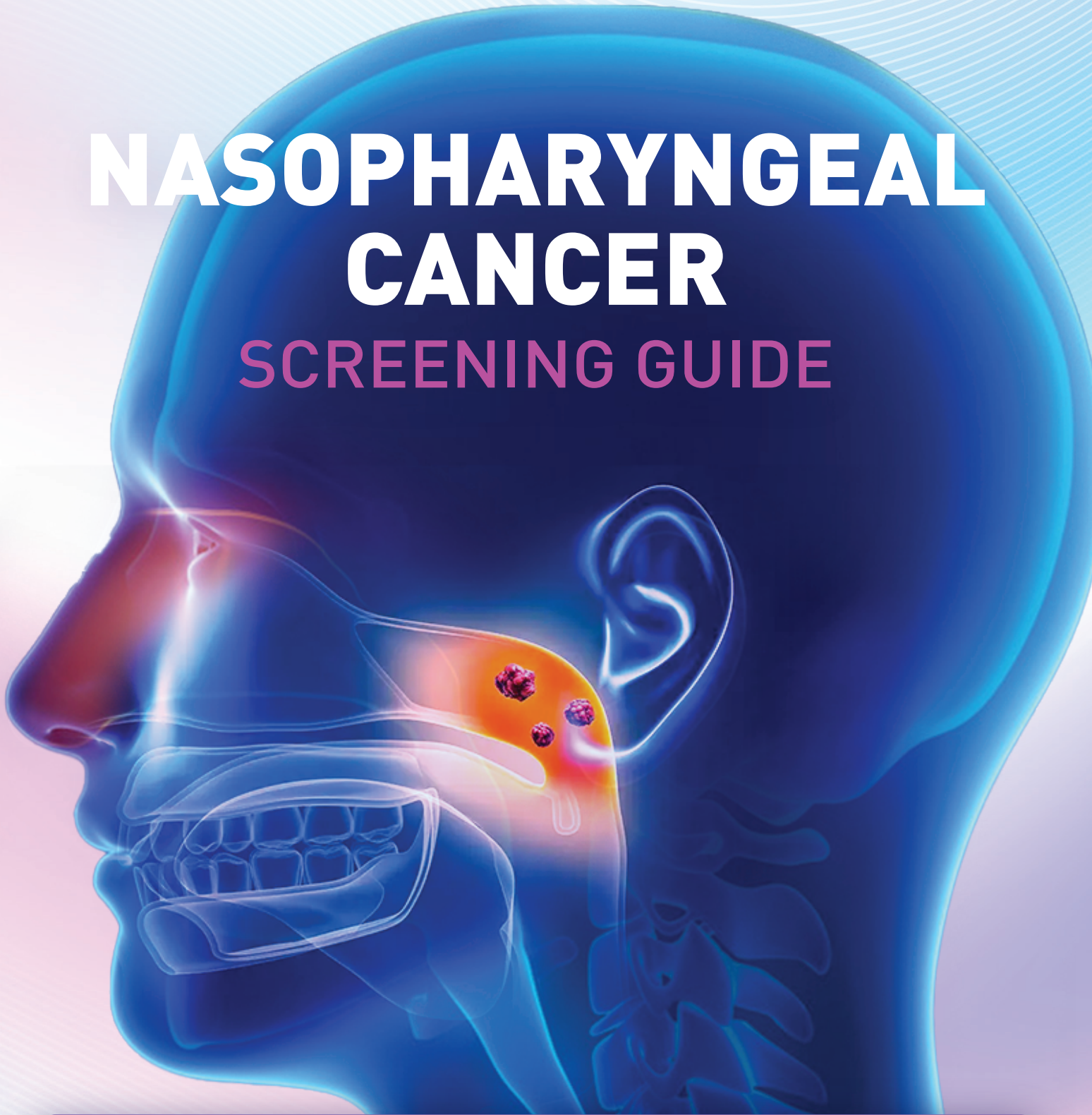


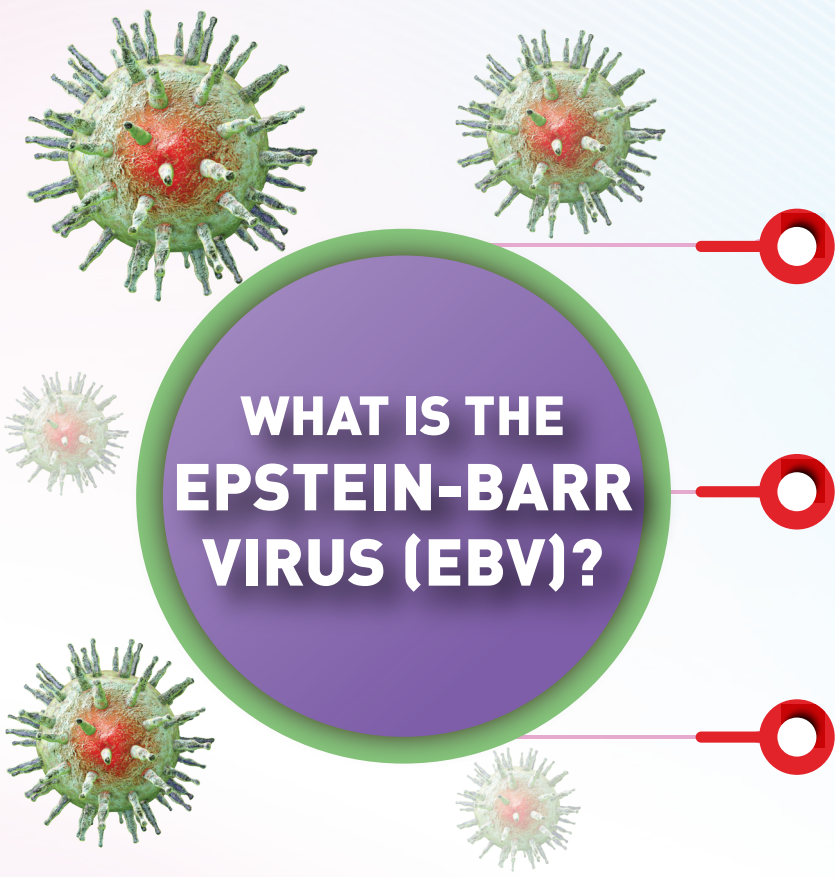


# NASOPHARYNGEAL CANCER

## SCREENING GUIDE



The nasopharynx is the **upper part of the throat that lies behind the nose and under the skull**. Nasopharyngeal cancer results from the abnormal growth of cells in the nasopharynx. In Malaysia, nasopharyngeal carcinoma (NPC) is the fourth most common cancer.



## WHAT IS THE EPSTEIN-BARR VIRUS (EBV)?

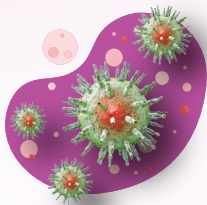
**The Epstein Barr virus (EBV)** is a very common virus that can increase one's risk of nasopharyngeal cancer.

**EBV is a very common viral infection** that spreads through saliva and other bodily fluids.

**Most people carry EBV,** and it does them no harm.

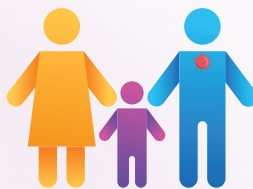
## NASOPHARYNGEAL CANCER RISK FACTORS

1



Epstein-Barr virus (EBV) infection

2



Family history of nasopharyngeal cancer

3



High intake of preserved, salted or fermented food or fruit

4



Smoking

5



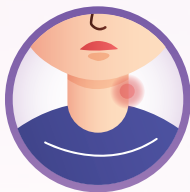
Occupational exposure to wood dust, chemicals, dust, exhaust or smoke

6



Individuals of Southern Chinese descent

# NASOPHARYNGEAL CANCER SIGNS & SYMPTOMS



Painless neck lump(s)



Blocked nose



Double vision



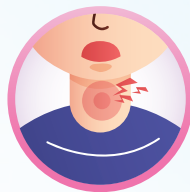
Headache



Nose bleed or  
bloodstained phlegm,  
especially upon waking  
up in the mornings



Facial numbness



Sore throat



Unilateral ear  
pressure or ringing  
sound in the ear

## SCREENING AND DIAGNOSIS OPTIONS

### EBV DNA

The EBV DNA test is a diagnostic test used to detect the presence of EBV genetic material (DNA) in a person's blood.

#### PURPOSE

To determine if a person is currently infected with EBV.

#### PROCEDURE

A blood sample will be taken, and the DNA from the virus will be analysed.

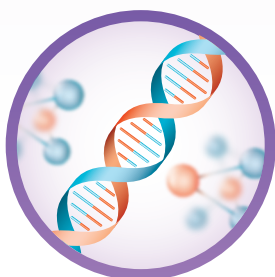
#### INTERPRETATION

##### Positive Result:

Indicates an active EBV infection.

##### Negative Result:

Suggests no current EBV infection.



### EBV VCA-IgA ANTIBODY BLOOD TEST

The EBV VCA-IgA antibody test detects specific antibodies produced by the immune system in response to the EBV viral capsid antigen (VCA).

#### PURPOSE

- To diagnose acute EBV infection.
- To aid in the diagnosis of type 2 or type 3 nasopharyngeal carcinoma (NPC).

#### PROCEDURE

A blood sample will be collected.

#### INTERPRETATION

##### IgA Antibodies Present:

Indicates a current or recent EBV infection.

##### IgA Antibodies Absent:

Suggests no recent EBV infection.



# NASAL ENDOSCOPY

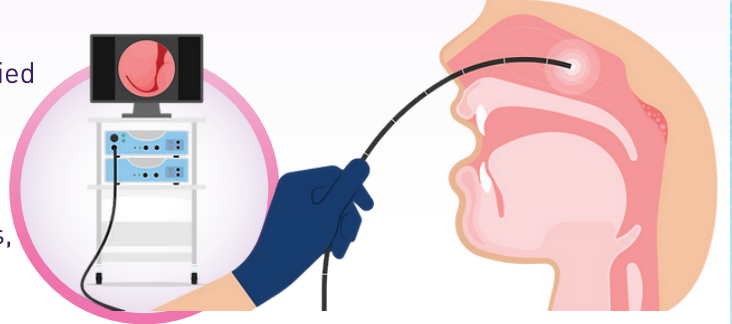
A nasal endoscopy is a diagnostic procedure that allows a doctor to examine the inside of the nasal passages and sinuses using a thin, flexible tube called an endoscope.

## PURPOSE

To evaluate nasal and sinus conditions (e.g., nasal polyps, tumours).

## PROCEDURE

- A local anaesthetic or numbing spray is applied to the nasal passages.
- The endoscope is inserted through the nostril and advanced into the nasal cavity.
- The doctor can visualise the nasal structures, take biopsies, and assess any abnormalities



## NASOPHARYNGEAL CANCER TREATMENT OPTIONS



1

### Radiotherapy

**Mechanism:** Uses high-energy beams to kill cancer cells or slow their growth.

**Target:** Nasopharynx and neck lymph nodes

**Effectiveness:** Commonly used for early-stage NPC and in combination with chemotherapy for more advanced stages.

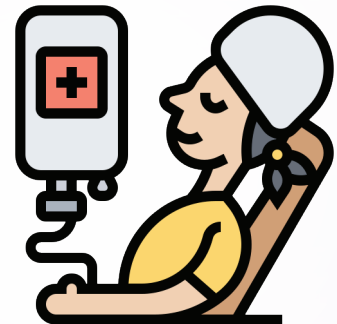
### Chemotherapy

**Mechanism:** Anti-cancer drugs destroy cancer cells.

**Administration:** Intravenous

**Effectiveness:** Often combined with radiation therapy to potentiate the action of radiation.

2



3

### Surgery

**Indication:** Used if cancer recurs or persists after initial treatment.

**Procedure:** Removal of the main tumour and affected lymph nodes.

