

symptoms may be ignored or diagnosis may be elusive.

Your doctor will also use the endoscope (an endoscope is a thin, tube-like instrument with a light and a camera lens for viewing), or another instrument to take a small tissue sample (biopsy) to be tested for cancer. Biopsy refers to the removal of cells or tissues so they can be viewed under a microscope in a laboratory by a pathologist to check for signs of cancer. A biopsy is the only sure way to diagnose NPC beyond doubt !

Once the diagnosis is confirmed, your doctor orders other tests to determine the extent (stage) of the cancer. This may include chest X-ray, CT scan of the neck and ultrasound of the liver.

Many people are not diagnosed with NPC until it has spread, probably because the nasopharynx is not easy to examine and symptoms of this cancer mimic those of many other conditions. Even a nasal polyp can sometimes mimic NPC. However, as NPC becomes more advanced, it also becomes more difficult to treat successfully.

So what is the treatment ?

Your main treatment options for NPC are radiation therapy/radiotherapy, chemotherapy or a combination of the two. Radiotherapy is a cancer treatment that uses high-energy x-rays or other

types of radiation to kill cancer cells or keep them from growing. Chemotherapy is a cancer treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from multiplying. Surgery is not often used as a treatment for NPC, unless for recurrence. Much research is ongoing currently to improve the treatment outcome.



NPC generally has good prognosis if detected early. Prognosis (chance of recovery) and treatment options depend on the following:

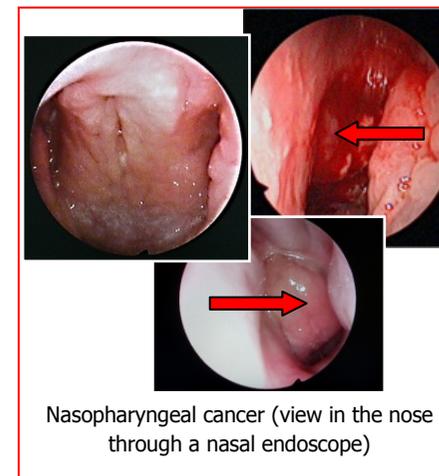
- ✓ The stage of the cancer (whether it affects part of the nasopharynx, involves the whole nasopharynx, or has spread to other places in the body).
- ✓ The type of NPC (WHO Type I, II or III).
- ✓ The size of the neck lymph nodes.
- ✓ The patient's age and general health.

How do I prevent NPC ?

Unfortunately, NO sure way exists to prevent NPC. However, you can take steps to reduce your risk of the disease. For instance, cut back on the amount of salt-cured foods and preserved meats that you eat, or choose to avoid these food altogether.

NASOPHARYNGEAL CANCER

(NPC)



This patient education handout is intended to help patients and their families learn more about their medical conditions, the options available to them and the possible consequences of their decisions. This information is not intended to be used for diagnosis, or treatment of any specific individual. Please consult your ENT doctor regarding your particular condition.

DR. VINCENT TAN

MD (UKM), A.M. (MAL.), MS ORL-HNS (UKM),
DOHNS RCS EDINBURGH (UK), MRCS EDINBURGH (UK),
POSTGRAD CERT. IN ALLERGY (UK)
Associate Professor & Consultant Ear, Nose and Throat,
Head and Neck Surgeon



www.entheadandneckspecialist.com

T: +603-6141 8533 E: ENTdrvincenttan@gmail.com

What is nasopharyngeal cancer (NPC) ?:

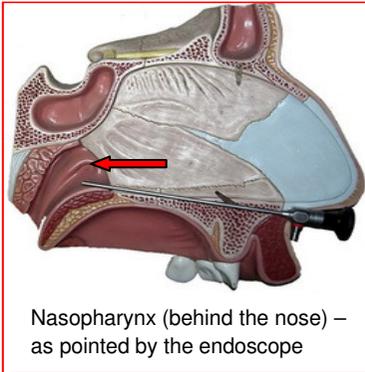
NPC is cancer that occurs in the nasopharynx, an area located behind your nose and above the back of your throat.

NPC is difficult to detect early, probably because the nasopharynx

isn't easy to examine (it is impossible to see unless an endoscope is used in an ENT clinic) and symptoms of NPC mimic those of many other conditions. In its early stages, NPC may not cause any symptoms !

Possible noticeable symptoms of NPC include:

- A lump in your neck caused by a swollen lymph node
- Bloody discharge from your nose
- Nasal congestion on one side of your nose
- Hearing loss in one ear
- Frequent ear infections
- Headaches
- Double vision
- Face and neck pain



Nasopharynx (behind the nose) – as pointed by the endoscope



Swollen neck lymph node

What are the complications?

NPC frequently spreads (metastasizes) beyond the nasopharynx. Many people with NPC have regional metastases, meaning cancer cells from the initial tumor have migrated to nearby areas, such as lymph nodes in the neck, causing the lymph nodes to be swollen. Cancer cells that spread beyond the head and neck (distant metastases) most commonly travel to the bones and bone marrow, lungs and liver.

What are the risk factors ?

Researchers have identified some risk factors that appear to increase your risk of developing NPC, including:

- **Gender.** Men have about double the risk of developing cancer of the nasopharynx as women do.
- **Race.** This type of cancer more commonly affects people in Asia and northern Africa. In Malaysia, the Chinese in particular has a higher risk of NPC and in Sarawak, the Bidayus.
- **Age.** Most cases of NPC occur in people between the ages of 30 and 55. However, it can still occur outside this age group.

- **Salt-cured food.** Chemicals released in steam when cooking salt-cured foods, such as fish, preserved vegetables and Chinese herbs, may enter the nasal cavity, increasing the risk of NPC. In China, NPC has been linked to high consumption of salted fish, and as people in Southeast China are adopting a more Western diet, their rates of NPC have been declining.
- **Preserved meats.** Preserved meats contain high levels of nitrates, which may increase the risk of NPC.
- **Family history.** Having a family member with NPC increases your risk of the disease, This could be due to genetic or environmental factors.

How is NPC Diagnosis made?

Diagnosing NPC usually begins with a general examination by your ENT surgeon. Your doctor will ask questions about your symptoms. He or she may

press on your neck to feel for swelling in your lymph nodes. Because early signs and symptoms of this cancer are not specific to the disease, the initial



Endoscopy of nose