

**Case report**

**Cured nasopharyngeal carcinoma stage IV with Haemostatic-intent radiotherapy**

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**Abstract:**

Nasopharyngeal carcinoma (NPC) is known to present with nasal and aural symptoms. Sometimes neck mass and cranial nerve palsies can be the presenting symptom. Frank epistaxis is relatively rare. Advanced stage disease is usually treated with concurrent chemoradiotherapy. We are reporting a case of NPC patient presented complete nasal obstruction with frank epistaxis. The bleeding was stopped and the disease cured with hemostatic-intent radiotherapy.

**Key words:** nasopharynx; carcinoma; advanced disease; epistaxis; radiotherapy

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**Introduction:**

Nasopharyngeal carcinoma (NPC) is common in South-east Asian countries. In Malaysia, the incidence is 25 cases for every 100,000 people in the population. NPC is the most common head and neck cancer. In general it is the second common cancer among men after lung cancer.<sup>1</sup> NPC is a radiosensitive disease. Radiation therapy is primary treatment modality for NPC. Radiotherapy alone is well accepted for the management for early stage (I and II) disease.<sup>2</sup> In some situation, if the epistaxis is frank, the modality can be used for hemostatic effect. In the present case of stage IV patient, the tumour subsided after the completion of 35 fractions of radiotherapy alone.

**Case summary:**

A 35-year-old Malay gentleman with no previous medical illness, presented with right sided epistaxis for 1 year duration. It was spontaneous in onset of minimal dripping of blood. He claimed occasionally had experienced large amount and associated with blood clots.

There was history of right sided nasal block. It was progressively worsening involving both nostrils. He also lost his sense of smell.

He also gave history of right sided neck swelling, which was the size of a pea and progressively increased in size to a size of a golf ball. There is no

history of shortness of breath or dysphagia. There was no change in voice or noisy breathing. There was history of loss of weight and loss of appetite noted for the last 1 year.

On initial examination, he was slightly pallor. The nasal dorsum was broadened. The right nasal mass can be seen protruding out from the nostril (Figure 1). Nasal examination showed nasal cavity mass occupying whole of right and left nasal cavity. There were minimal clots. No contact bleeding. Friable irregular mass was biopsied. The result was undifferentiated nasopharyngeal carcinoma (T4N1M0).

Right neck swelling measuring 3x3 cm firm was noted (Figure 2). It was fixed. There were no skin changes or ulcers over the swelling.

The patient represented with frank excessive epistaxis before the planned chemotherapy and radiotherapy were instituted. He had signs and symptoms of anemia.

Radiotherapy was given to stop the frank bleeding hemostatic intention and to continue for radical dose of radiation depending on the response. A total of 35 fractions were given. No chemotherapy was given keeping in view of his general condition and disease status. He was seen after 3 months post radiotherapy in the combined Head and Neck Oncology Tumor board. He claimed there were

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Figure 1: The mass protruding out from the right nostril

weight gain, and no more epistaxis and nasal block. Anosmia has improved.

A repeat nasal endoscopy, showed polyps over right middle meatus. No suspicious mass at FOR or any other parts of nasal cavity. He was put on surveillance at the referring hospital with regular CT scan evaluation at 6 monthly intervals.

**Discussion:**

The incidence of NPC is on rise with age, particularly between age of 50 and 60. The Malaysian Chinese male has the second highest incidence in comparison to the rest of the world.<sup>1</sup> Patients with NPC usually present either with mass in the nasopharynx, Eustachian tube dysfunction, fifth and sixth cranial nerve palsy and neck masses.<sup>3</sup> A retrospective analysis of 4768 patients showed most common symptoms of NPC as neck masses (76%), followed by nasal symptoms (73%), aural dysfunction (62%), headache (35%), diplopia (11%), facial numbness (8%), weight loss (7%) and trismus (3%).<sup>2</sup>

The most common radiotherapy approaches for NPC is to start phase I treatment with en bloc treatment of nasopharynx and upper neck with



Figure 2: Ipsilateral right level IV cervical lymphadenopathy was present

parallel opposed lateral fields. Lower neck and supraclavicular fossa treated with anterior field or anterior and posterior fields depending on the neck nodes. For phase II treatment, the fields are reduced over posterior neck to keep spinal cord out of the field of radiation to keep the radiation dose to spinal cord within tolerance.<sup>2</sup> Dose of 70Gy is delivered to the primary tumour and 65 -70 Gy to the involved neck nodes. Prophylactic treatment for a node negative neck is 50-60Gy. This regime has successfully controlled T1 and T2 tumours in 75-90% of cases and T3 and T4 tumours in 50-75% of cases.<sup>3,4</sup> Nodal control is achieved in 90% of N0 and N1 cases but the control rate reduce to 70% for N2 and N3 cases.<sup>3</sup> Every effort should be made to maintain the treatment schedule because interrupted or prolonged treatment will compromise the response rate to the treatment.<sup>5</sup>

Nowadays, several studies have reported combination of chemotherapy with radiotherapy for the management of loco-regional advanced cases of NPC.<sup>3</sup> The first study to show that usage of chemotherapy with radiotherapy improved overall survival compared with radiotherapy alone was



Figure 3: Axial and coronal cuts of CT scan showing the mass effect of the tumour

done by Intergroup 1997 study.<sup>6</sup> The conclusion from three basic approaches tested in these studies (neo-adjuvant, concurrent and adjuvant chemotherapy), concurrent chemo-radiotherapy is the most efficacious. However, the administration of chemotherapy adjunctive to radiotherapy for stage III and IV remained a controversial issue because of conflicting reports in the literature.<sup>6</sup> Cytotoxic chemotherapy plays an important role in the curative and palliative treatment of advanced NPC.<sup>7</sup> In general patient that present

with metastasis at diagnosis have worst prognosis compared with those who developed distant failure after radiotherapy. The most common indication for palliative therapy is for the loco-regional recurrence or metastatic disease cases. Although no randomized trial has been reported comparing the different chemotherapy regimens, the role of chemotherapy in metastasis is well established, and remains an important palliative treatment.<sup>8</sup>

**Conflict of interest:** None

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