Palliative Medicine Grand Round (11th February 2003):
Palliative Care in Advanced Head & Neck Cancer – Part II:
Management of patients with HNC in palliative care setting
Dr. Tracy Chen, Hospice Unit, Caritas Medical Centre.

Introduction
The problems experienced by HCN as presented to palliative care workers are of a wide
spectrum, ranging from acute and devastating events to chronic and resistant ones; and from
predominantly physical predicaments to complex psychosocial sufferings. The following discussion
is not all embracing, but serves to reflect the complexity and as a practical outline.

Management of emergency conditions
Acute tracheostomy obstruction
Tracheostomy can be blocked acutely by bleeding from tracheostomal recurrence or
severe crusting of secretions. If blockage occurs, the inner tube of tracheostomy should be removed,
followed by suctioning through the outer tube of. Re-suctioning can be repeated with instillation of 5
ml of normal saline into the tube if necessary. If obstruction persisted, one can remove and clean
or replace the outer tube. If the outer tube has to be removed, the tracheal dilator must be available
in hand.

Acute major airway obstruction
The onset of tracheal obstruction may be slow if due to tumour growth, but acute if
precipitated by haemorrhage or infection. Most patients would have previous radical RT. Lumen
patency can be restored by interventional bronchoscopic procedures e.g. laser therapy for
endoluminal lesions, and endobronchial stent for extrinsic compression. Other options include
external beam radiotherapy or endobronchial brachytherapy. Correction of hypoxia with oxygen or 4:1 helium:oxygen mixture, which has a lower viscosity than air and can reduce respiratory
effort. Dexamethasone at a starting dose of 16mg daily may be helpful. Benzodiazepine can be
used to reduce anxiety or panic, e.g. diazepam 5-10mg IV, midazolam 2.5-5mg IV or SC. Nebulized normal saline helps to facilitate removal of sticky sputum. Palliative sedation may be
considered if symptoms are refractory to treatment.

Massive arterial bleeding
There is a higher risk of massive arterial bleeding in patients with eroding tumours close to
carotid arteries. Unconsciousness and death may occur rapidly before sedation is allowed. If
time allows, patient should be sedated with midazolam or diazepam intravenously or
intramuscularly. It is important to note that drugs given subcutaneously are poorly absorbed in
circulatory shutdown. A dark green cloth is helpful in camouflaging blood, and to reduce the
visual impact on relatives and staff.

Management of chronic problems
Pain control
Elucidation of underlying causes of pain is important. Pain can result from deep tissue
infiltration, cranial nerve involvement, tumour ulceration, or the effects of surgery or radiotherapy
such as mucositis or fibrosis. Psychosocial factors can contribute to pain. Analgesics can be
prescribed according to the WHO analgesic ladder. NSAIDs may be helpful especially in the presence
of bone involvement and inflammation. Tricyclic antidepressants or anti-convulsants can be given
for neuropathic pain, and steroids as an anti-inflammatory agent. Antibiotics e.g.
metronidazole can be used to cover anaerobic organism infections. Local radiotherapy and
ergave block may be considered for pain control in
appropriate candidates.

Communication and speech disorders
Treatment options for patients following
laryngectomy include osesophageal speech, electronic vibrator (to be applied to cervical skin), tracheo-oesophageal shunt voice. Speech therapist can help the patients to develop general strategies during speaking e.g. to lower the speed of speech, to break words into syllables, to maintain face-to-face contact, and to reduce the background noises. Other helpful techniques are compensatory movements of tongue during speaking.

Swallowing disorders and aspiration
An intact anatomy and an effective cough reflex offer important protection to the airway during swallowing, without which, aspiration of oropharyngeal or gastric contents into the larynx and lower respiratory tract can occur. The clues of aspiration include: (1) choking after feeding; (2) noisy breathing, cough or dyspnoea at night as oropharyngeal secretions accumulated due to suppressed cough reflex by sedatives, hypnotics or opioids; (3) chest X-ray showing infiltrations in posterior segment of the upper lobes, apical basal or basal segments of lower lobes.

The “3-Ounce Water Swallow Test” is a bedside screening test for assessment of risk of aspiration performed by asking the patient to drink 3 ounces of water. Aspiration is suggested if patient coughs, or demonstrates a wet or hoarse voice during or immediately after the test. This test correctly detected 80% of those who aspirate on videofluoroscopy20 Formal assessment by speech therapist and Video Fluoroscopic Swallowing Study (VFSS) are better assessment for aspiration.

In presence of aspiration, it is important to maintain a good oral hygiene in order to reduce the bacterial colonisation. Specific swallowing strategies include feeding patient at an upright position, dividing the food into small boluses, feeding slowly, etc. In patients with immobile hemipharynx it is helpful to tilt or turn the head towards the paralysed side to open the contralateral normally functioning lateral food channel. For those with reduced tongue control, the postural compensation techniques or exercises may be helpful. Other measures such as dietary modification with foods of pasty consistency may reduce risk of aspiration. Aspiration pneumonia should be treated. Carers/ family members should be educated on the correct method of feeding. Sometimes artificial feeding via a fine-bore nasogastric tube or PEG (percutaneous endoscopic gastrostomy tube) has to be considered in appropriate cases. For patients with drooling of saliva, antimuscarinic agents e.g. hyoscyne hydro- bromide, glycopyrrolate may be useful.

Airway obstruction
Tracheostomy is considered for appropriate patients in order to maintain airway patency and to allow expectoration of secretions. The indications of tracheostomy include bilateral vocal cord paralysis, laryngectomy, and tumour occluding the airway. Basic care of tracheostomy include: (1) humidification of inspired air e.g. steam inhalation; (2) clearing of secretions by regular deep-breathing exercises and chest physiotherapy; (3) suctioning for viscid secretions or mucous plugs.

Xerostomia
Xerostomia is associated with Candida colonisation and secondary parotid or submandibular sialadenitis. The objectives of care include maintenance of good oral hygiene, keep lip and mouth moist with frequent water spraying and maintenance of room humidification. The use of oral pilocarpine may be helpful. Infections should be treated accordingly.

Fungating wounds
Wounds in HNC may be characterized by excessive purulent discharge, odour and infection. In assessment, one should look for presence of: (1) adherent necrotic tissue; (2) exudate; (3) bleeding due to traumatic dressing change; (4) pain with dressing; (5) surrounding skin condition; (6) odour; (7) infection; (8) impact on patient.

The aim of treatment is to control pain and odour, to reduce discharge, and to provide psychological support. Odour and discharge can
be reduced by antibiotic (e.g. metronidazole) either topically or systemically, adequate ventilation, and the use of special dressing materials. Local RT may have a haemostatic effect for wound with bleeding.

**Disfigurement related psychological issues**

Management of psychological issues related to disfigurement involves multiple disciplinary input from palliative care physicians, specialist nurses, social workers, clinical psychologists and psychiatrists. Griffiths suggested the Seven Tactics to Help Disfigured People (Table)

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<th>Table: Tactics to help disfigured people</th>
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<tr>
<td>Not giving in to avoidance</td>
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<td>Using controlled breathing to control fear and anxiety</td>
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<td>Using positive self-talk</td>
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<td>Concentrating on relevant information to distract from upsetting thoughts</td>
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<td>Avoiding misinterpreting the discomfort of others as rejection</td>
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<td>Finding a way to acknowledge the disfigurement</td>
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<td>Congratulating success</td>
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**Conclusion**

The advanced HNC presents difficult and unique problems to patients, carers, and health care professionals. Living with advanced HNC is often emotionally traumatic for both patient and carer. The HNC patient has to cope with a terminal disease, impact and complications of treatment, and psychological consequences of disfigurement. Health care professionals often find caring for HNC patients difficult and stressful, especially in the presence of communication difficulties. Carers need access to support and advice. Lastly, multidisciplinary approach to management of advanced HNC is necessary.

**References**