ELIGIBILITY:
- locally advanced nasopharyngeal cancer (T3-4, N1-3, M0)
- suitable for radical radiation
- Patients with squamous cell carcinoma of the head and neck or squamous cell carcinoma of unknown primary who are unable to tolerate the standard option of HNLAPRT, (CISplatin 100mg/m2 q3wk), may receive HNNLAPRT as an alternative.
- ECOG 0-2

EXCLUSIONS:
- contraindication to CISplatin (e.g. deafness, intolerance to fluid load, neuropathy)

TESTS:
- Baseline bloodwork: CBC & diff, creatinine, LFTs (including ALT), lytes, BUN, albumin, magnesium, calcium, phosphate
- If clinically indicated for patients judged to be at risk for hepatitis B baseline: (Results do not have to be available to proceed with treatment) HBsAg, anti-HBsAg and anti-HBcAg (=HBcoreAb)

Before each treatment (on treatment day or previous day, attempt to coordinate with routine radiation therapy tests):
- CBC & diff, creatinine, electrolytes, calcium, albumin, magnesium weekly during chemotherapy
Mid-treatment week 3 or 4
- If clinically indicated: ALT, HBviralDNA

PREHYDRATION:
1,000 mL NS with 20 mEq potassium chloride and 2 g magnesium sulphate over 1 hour, prior to CISplatin

ANTIEMETICS:
As per highly emetogenic protocol (see SCNAUSEA protocol)

TREATMENT:
**Note:** Since CISplatin is a radio-sensitizing as well as an active agent, it is to be administered on a day on which radiation therapy is delivered. If radiation therapy is cancelled, do not give CISplatin that day: postpone until radiation therapy resumes.
Drug | Dose | BCCA Administration Guidelines
--- | --- | ---
CISplatin | 40 mg/m² | IV in 500 mL NS over 1 hour

Repeat weekly x 7 cycles (each week is one cycle). Patients to receive at least 2 cycles of CISplatin with radiation. Recommended to have clinical assessment after every 2 cycles (ie, every 3rd cycle).

DOSE MODIFICATIONS:
1. Hematological:

<table>
<thead>
<tr>
<th>ANC (x 10⁹/L)</th>
<th>Platelets (x 10⁹/L)</th>
<th>Dose</th>
</tr>
</thead>
</table>
greater than or equal to 0.8 and greater than or equal to 100 | 100% |
less than 0.8 or less than 100 | 50% dose reduction |

2. Renal dysfunction:

<table>
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<tr>
<th>Creatinine Clearance (mL/min)</th>
<th>Dose</th>
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</table>
less than 50 mL/min | Delay chemotherapy, recheck in 1 week |
less than 50 mL/min after overnight hydration | Discontinue protocol |

PRECAUTIONS:
1. Renal Toxicity: Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycosides.
2. Ototoxicity: CISplatin is ototoxic and its use must be cautioned in individuals with existing hearing loss.
3. Neutropenia: Fever or other evidence of infection must be assessed promptly and treated aggressively.
4. Hepatitis B Reactivation: Patients who have elevated ALT levels along with a positive anti-HBcAg may require treatment with lamivudine 100mg orally daily for the entire duration of chemotherapy and for six months afterwards. Such patients should also be monitored with ALT and HB viral DNA levels mid-treatment, week 3 or 4. If the hepatitis B virus DNA level rises during this monitoring, management should be reviewed with an appropriate specialist with experience managing hepatitis and consideration given to halting chemotherapy.

Call Dr. Cheryl Ho or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

Date activated: 1 April 2006 (as HNRADC)
Date revised: 1 May 2014 (eligibility criteria to include ECOG status)
References