Systemic Anti-Cancer Treatment Protocol

Cisplatin 40mg/m^2 weekly Head and Neck Regimen

PROCEDURE REF: MPHAHANCIW
(Version No: 1.1)

Approved for use in:

Locally advanced head and neck cancer – with concurrent radiotherapy
PS 1 – 2
Creatinine clearance at baseline > 50mL/min

Dosage:

Drug	Dose	Route	Frequency
Cisplatin	**40mg/m^2**	IV infusion	Every 7 days

Repeated every 7 days for up to 6 weeks

Supportive Treatments:

Dexamethasone 4mg orally twice daily for 3 days
Domperidone 10mg three times a day when required

Extravasation risk:

Cisplatin: Exfoliant
Injection site reactions may occur during the administration of cisplatin.
Treatment – consider hyaluronidase, topical hydrocortisone cream, warm compression.

Administration:

- Review patient's fluid intake over the previous 24 hours
- Review common toxicity criteria and performance status
- Calculate creatinine clearance using Cockcroft and Gault equation (see investigation section)

Day	Drug	Dose	Route	Diluent and rate
1	**Ondansetron** Immediately prior to hydration	**16mg**	**IV**	
	Dexamethasone Immediately prior to hydration	**8mg**	**IV**	
	Sodium Chloride 0.9%	500mL	**IV**	Over 60 minutes
	Cisplatin	**40mg/m^2**	**IV**	Sodium Chloride 0.9% 1000mL over 60 minutes
	Sodium Chloride 0.9%	500mL	**IV**	Over 60 minutes

Ensure good oral (or via PEG) fluid intake

- **Confirm patient understanding of the importance of fluid intake**
- **Patient should ensure they have 2 litres of fluid in the 24 hours following chemotherapy**

Main Toxicities:

Cisplatin

Anaphylactic-like reactions to cisplatin have been reported

Haematological: leukopenia, thrombocytopenia and anaemia

Gastrointestinal: anorexia, nausea, vomiting and diarrhoea

Nephrotoxicity: urine output of 100 ml/hour or greater will help minimise cisplatin nephrotoxicity.

Neuropathies

Ototoxicity: observed in up to 31% of patients, can be unilateral or bilateral and tends to become more frequent and severe with repeated doses; It is unclear whether ototoxicity is reversible.

Investigations:

	Pre	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Medical Assessment	X	X	X	X	X	X	X
Nursing Assessment		X	X	X	X	X	X
FBC	X	X	X	X	X	X	X
U+E & LFT & Mg	X	X	X	X	X	X	X
CT scan	X						
Informed Consent	X						
PS recorded	X	X	X	X	X	X	X
Toxicities documented	X	X	X	X	X	X	X
Weight recorded	X	X	X	X	X	X	X

Cockcroft and Gault formula

Male patients $\frac{1.23 \times (140 - \text{age}) \times \text{weight (kg)}}{\text{Serum Creatinine (micromol/L)}}$

Female patients $\frac{1.04 \times (140 - \text{age}) \times \text{weight (kg)}}{\text{Serum Creatinine (micromol/L)}}$

Dose Modifications and Toxicity Management:

Haematological Toxicity:

Proceed on day 1 if:

Platelet ≥ 100 x 10^9/L	ANC ≥ 1.0 x 10^9/L

Omit cisplatin dose if:

Platelet ≤ 99 x 10^9/L	ANC ≤ 0.9 x 10^9/L

Renal impairment:

Review toxicity of previous dose of cisplatin and take account of previous renal impairment when making decision about subsequent doses. Cisplatin to be discontinued if creatinine clearance is below 40mL/min, to continue with radiotherapy alone.

Hepatic impairment: No dose reduction necessary.

References:

Dosage Adjustment for Cytotoxics in Hepatic Impairment: January 2009 UCLH - Dosage Adjustment for Cytotoxics in Hepatic Impairment (Version 3 - updated January 2009)

Dosage Adjustment for Cytotoxics in Renal Impairment: January 2009 UCLH - Dosage Adjustment for Cytotoxics in Renal Impairment (Version 3 - updated January 2009)