Systemic Anti-Cancer Treatment Protocol

Paclitaxel
Head and Neck

PROTOCOL REF: MPHAPACHN
(Version No: 1.2)

Approved for use in:

Recurrent or metastatic head and neck cancer as 2nd or subsequent line of treatment

Dosage:

Drug	Dosage	Route	Frequency
Paclitaxel	175mg/m²	IV	21 days

Repeated every 21 days for 6 cycles

Alternatively, in patients with borderline performance status if second line chemotherapy treatment is still considered appropriate consideration can be given for weekly paclitaxel

Drug	Dosage	Route	Frequency
Paclitaxel	80mg	IV	Every 7 days

Repeated weekly for 12 weeks and then review

Supportive treatments

Domperidone tablets, 10mg three times a day when required

Extravasation risk:

Paclitaxel - vesicant

Interactions

The metabolism of paclitaxel is catalysed, by cytochrome P450 isoenzymes CYP2C8 and CYP3A4. Use with caution when administering paclitaxel concomitantly with medicines known to inhibit (e.g. erythromycin, fluoxetine, gemfibrozil) or induce (e.g. rifampicin, carbamazepine, phenytoin, phenobarbital, efavirenz, nevirapine) either CYP2C8 or CYP3A4.

Administration:

3 weekly regimen

Day	Drug	Dose	Route	Diluent and rate
1	Chlorphenamine	10mg	IV	30 minutes before chemotherapy
	Dexamethasone	16mg	IV	30 minutes before chemotherapy
	Famotidine	20mg	Oral	At least 60 minutes before chemotherapy (can be discontinued after three cycles for those patients who do not experience a drug hypersensitivity reaction).
	Paclitaxel	**175mg/m²**	**IV**	**500mL sodium chloride 0.9% over 3 hours** using a non-PVC giving set with a 0.22 micron filter

Starting dose may be reduced to 135mg/m^2 in patients with reduced PS or other co-morbidities.

Weekly regimen

Day	Drug	Dosage	Route	Diluent and Rate
1	Dexamethasone	8mg	IV	30 minutes before chemotherapy
	Famotidine	20mg	Oral	At least 60 minutes before chemotherapy (can be discontinued after three cycles for those patients who do not experience a drug hypersensitivity reaction).
	Chlorphenamine	10mg	IV	30 minutes before chemotherapy
	Paclitaxel	**80mg/m²**	**IV**	**500mL sodium chloride 0.9% over 60 minutes** using a non-PVC giving set with a 0.22 micron filter

Main Toxicities:

Haematological	Neutropenia, anaemia, thrombocytopenia
Gastrointestinal	Diarrhoea, vomiting, nausea, mucosal inflammation
Hypersensitivity reactions	Dyspnoea and hypotension, angioedema and urticaria In the case of severe hypersensitivity reactions, paclitaxel infusion should be discontinued immediately, symptomatic therapy should be initiated
Hepatotoxicity	Raised AST and or alkaline phosphatase, raised bilirubin
Neurotoxicity	Peripheral neuropathy is frequent reported
Cardio toxicity	Bradycardia, myocardial infarction, AV block and syncope, cardiomyopathy, asymptomatic ventricular tachycardia
Reproductive system	Possible birth defects. Male and female patients of childbearing potential should use effective contraception during and up to 6 month after receiving treatment
Skin and subcutaneous tissue disorders	Alopecia, transient and mild nail and skin changes

Investigations and Treatment Plan:

	Pre	C1	C2	C3	Ongoing
Medical Assessment	X			X	At end of treatment
Nursing Assessment		X	X	X	Every cycle
FBC	X	X	X	X	Every cycle
U&E & LFTs	X	X	X	X	Every cycle
CT scan	X				As clinically indicated
Informed Consent	X				
Blood pressure measurement	X	X	X	X	As clinically indicated
PS recorded	X	X	X	X	Every cycle
Toxicities documented	X	X	X	X	Every cycle
Weight recorded	X	X	X	X	Every cycle

Dose Modifications:

For patients with grade 2 toxicity refer to consultant for review and consideration of dose reduction

Haematological Toxicity:

Proceed on day 1 if-

ANC ≥ 1.0 x 10^9/L	Plt ≥ 100 x 10^9/L

Delay 1 week on day 1 if-

ANC ≤ 0.9 x 10^9/L	Plt ≤ 99 x 10^9/L

For patients with bone marrow infiltration treatment maybe continued at lower platelet and neutrophil counts at treating physician discretion with clear documentation in case notes.

Paclitaxel	**Recommended dose reduction for toxicity management**
First dose reduction	75% of original dose
Second dose reduction	50% of original dose

Hepatic impairment:

Bilirubin /µmol/L	**Dose**
Bilirubin < 1.25 x ULN and **transaminase** < 10 x ULN,	135 or 175 mg/m^2 as planned
Bilirubin /µmol/L < 26 **Bilirubin /µmol/L** 27 to 51 **Bilirubin /µmol/L** >51	135mg/m^2 75mg/m^2 50mg/m^2
Paclitaxel is not recommended in patients with severely impaired hepatic function.	

Renal impairment:

No adjustments required

References

Tahara M Minami H Hasegaway et al Weekly paclitaxel in patients with recurrent or metastatic head and neck cancer. Cancer Chemother Pharmacol. 2011 Sep; 68(3):769-76.

Paclitaxel 6 mg/ml Concentrate for Solution for Infusion, Summary of Product Characteristics. Accord Healthcare Limited Middlesex. 15/04/2010. Available from: www.medicines.org.uk/emc/medicine Last updated 10/07/2014.

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

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

Stockley's drug interactions. Ninth edition. Edited K. Baxter. Pharmaceutical press. London. 2010