E P

Stage IIC – IV Seminoma

Drug/Dosage:	Etoposide	165mg/m^2	IV	D1, D2 and D3
	Cisplatin	50mg/m^2	IV	D1 and D2

Administration: Etoposide in 1 litre 0.9% Sodium Chloride IV over 1 hour

Cisplatin: 1 litre 0.9% Sodium Chloride + 20mmol KCl +10mmol $MgS0_4$ IV over 4 hours
Mannitol 20% 100 ml IV over 15 minutes
Cisplatin in 1 litre 0.9% Sodium Chloride IV over 4 hours
1 litre 0.9% Sodium Chloride + 20mmol KCl +10mmol $MgS0_4$ IV over 6 hours
1 litre 0.9% Sodium Chloride + 20mmol KCl +10mmol $MgS0_4$ IV over 6 hours

Frequency: 3 weekly cycle for 3–4 cycles

Main Toxicities: myelosuppression; nephrotoxicity; neurotoxicity / ototoxicity; alopecia; mucositis; electrolyte imbalance; infertility

Anti emetics: highly emetogenic

Extravasation: non - vesicants

Regular Investigations:	FBC	D1
	U&Es	D1
	Mg^{2+} and Ca^{2+}	D1
	LFTs	D1
	AFP, βHCG, LDH	D1
	EDTA	Prior to 1st cycle

Comments: For patients on Cycle 1 whose EDTA is not yet available, Cockcroft and Gault may be used to predict GFR. Cisplatin dose should be adjusted if necessary once EDTA available. EDTA should only be repeated if the result is borderline at the start of treatment or if there is a 30% change in serum creatinine.

Check electrolytes - additional supplementation of potassium, magnesium or calcium may be required.

Consider the use of allopurinol if patient has significantly bulky disease.

Careful review is required to ensure that side effects such as peripheral neuropathy or hearing loss are detected early.

Weight should be recorded prior to and at the end of cisplatin treatment, and a strict fluid balance chart should be maintained. An average urine output of at least 100ml/hr must be maintained throughout treatment, and cisplatin infusion should not be commenced unless this urine output is achieved. If the urine output is inadequate, the patient should be assessed and urine output increased by administering 500ml Sodium Chloride 0.9% IV +/- furosemide 20 – 40mg.

Reason for Update: Layout update only	Approved by Lead Chemotherapy Nurse: C Palles-Clark
Version: 2	Approved by Consultant: Dr J Money-Kyrle
Supersedes: Version 1	Date: 1.12.07
Prepared by: S Taylor	Checked by: S Seymour

Furosemide 20 – 40mg po may also be given if there is a positive fluid balance of 1.5 litres, a weight gain of 1.5kg or symptoms of fluid overload. The patient should be asked to drink 2 litres of fluid in the 24hrs following treatment, and to contact the hospital if this is impossible because of problems e.g. nausea and vomiting.

Dose Modifications

Haematological Toxicity: Dose modification and delays can compromise outcome and should be avoided. G-CSF should be prescribed as needed (but not on Days 1 – 3 of treatment) to maintain treatment schedule. If a patient needs treatment at any point with G-CSF, prophylactic G-CSF should be routinely prescribed with all future courses.

N.B. Patient must not be delayed without Consultant approval

Neutrophils < 1.0 x 10^9/l or Platelets < 100 x 10^9/l	Delay for 3 days, and initiate G-CSF if appropriate. Repeat FBC and, if recovered, continue with full dose treatment. If FBC still low after 3 days, seek advice from Consultant.

Renal Impairment NB. Cisplatin is both eliminated primarily (> 90%) in the urine and is itself nephrotoxic.

CrCl (ml/min)	Cisplatin Dose
> 60	Give 100%
50 – 60	Give 75%
40 – 50	Give 50%
< 40	CI (consider carboplatin)

CrCl (ml/min)	Etoposide Dose
60	Give 85%
45	Give 80%
30	Give 75%

Hepatic Impairment: Creatinine clearance is the strongest predictor of etoposide clearance. There is conflicting information about dose reduction with hepatic impairment. Use the table below but, if in doubt, discuss with Consultant.

Bilirubin (μmol/l)		AST (units/l)	Etoposide Dose
26 – 51	**or**	60 - 180	Give 50% dose
> 51	**or**	> 180	Clinical decision

Neurotoxicity: Seek further advice if the patient reports symptoms indicative of ototoxicity (tinnitus, deafness) or neurotoxicity (paraesthesias, difficulty with motor control).

Reference: Mencel, PJ et al; JCO 1994; 12: 120 - 126