

Chemotherapy protocol

Drug regimen

EP chemotherapy

Indications for use

Testicular seminomas Stage IIC-IV

Metastatic NSGCT where Bleomycin is contra-indicated

Regimen

Day	Drug	Fluid	Time
1	Etoposide 100mg/m ²	1litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
	Cisplatin 20mg/m ²	500ml NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
2	Etoposide 100mg/m ²	1 litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
	Cisplatin 20mg/m ²	500ml NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
3	Etoposide 100mg/m ²	1 litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
	Cisplatin 20mg/m ²	500ml NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
4	Etoposide 100mg/m ²	1 litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
	Cisplatin 20mg/m ²	1 litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
5	Etoposide 100mg/m ²	1 litre NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours
	Cisplatin 20mg/m ²	500ml NaCl 0.9%	1 hour
		1 litre NaCl 0.9% + 20mmol KCl + 10mmol MgSO ₄	2 hours

Strict fluid balance

Consider frusemide 20-40mg p.o/IV if >1000ml positive balance

Repeat every 21 days for 3-4 cycles

Investigations prior to initiating treatment

Urinary creatinine clearance
CT thorax/abdo/pelvis
Audiometry
Sperm banking
FBC, U&E, LFT incl. LDH, Uric Acid, Mg, Ca, AFP, β HCG

Cautions:

If bulky disease \Rightarrow Allopurinol 300mg p.o. during 1st cycle of chemotherapy and monitor for tumour lysis syndrome!
If creatinine clearance <60 ml/min \Rightarrow EDTA GFR

Investigations prior to each cycle of chemotherapy

FBC
U&E, LFT incl. LDH, Uric Acid, Mg, Ca, AFP, β HCG
CXR (if metastases present or primary mediastinal GCT)
Repeat GFR only if calculated clearance <60 ml/min (Cockcroft formula)

Acceptable limits for treatment to proceed

Any Hb (transfuse if < 9.0 g/dl)
Platelets > 50 (contact consultant if lower!)
WCC > 1.5 or Neutrophils > 0.5
Renal clearance ≥ 50 ml/min

ANY DEFERRAL NEEDS TO BE DISCUSSED WITH CONSULTANT AS TREATMENT DELAYS HAVE NEGATIVE EFFECT ON OUTCOME

Side effects

Nausea/vomiting
Alopecia
Infertility (some reversibility within 2 years of treatment)
Mucositis
Peripheral neuropathy
Ototoxicity (tinnitus/deafness)
Renal toxicity, electrolyte disturbance (especially magnesium loss)
Myelosuppression

Dose modification criteria:

GFR < 50 ml/min or neurotoxicity $>$ grade 2 replace Cisplatin with Carboplatin AUC 6

If patient required admission for treatment of febrile neutropenia, he should be prescribed pegfilgrastim 6mg s.c. 24 hours after completion of inpatient chemotherapy

Specific Information on administration

This is an inpatient regimen that must start on a Monday.
Check expiry of Etoposide bags carefully and use them in the correct order.

THIS PROTOCOL HAS BEEN DRAWN UP BY DR W. APPEL, DESIGNATED LEAD CLINICIAN FOR GERM CELL TUMOURS

THE RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

DATE November 2012
REVIEW November 2014
Version 9