VEPEM-B (as in the SHIELD Study)

INDICATION: Hodgkin's lymphoma in older patients

Prior to a course of treatment

- Assess cardiac function by history & examination, ECG and CXR. If there is evidence of cardiac disease or prior anthracyclines perform a MUGA scan. If LVEF< 50% *discuss with consultant*
- Check recent renal and hepatic function are within normal limits - *if not discuss with consultant and see dose modification*
- Patient should have adequate bone marrow reserve before commencing treatment, i.e neuts >1.0, platelets >100 - *if not discuss with consultant*
- Written consent for course

Prior to each cycle

- Medical review of fitness for chemotherapy – exclude active infection, major changes in organ function
- Check FBC days 1 & 15 – neutrophils must be > 2.0 & plats > 100 unless due to disease e.g splenomegaly, marrow infiltration (*see dose modifications*)
- Check U&Es, creat, LFTs days 1 & 15

Day 1	Vinblastine	6mg/m^2	IV bolus	stat
	Cyclophosphamide	500mg/m^2	IV bolus	stat
Day 1-5	Procarbazine *	100mg/m^2	PO	od
	Prednisolone	30mg/m^2	PO	od
Days 6-14	GCSF	5µg/kg	SC	od
Day 15	Mitozantrone	6mg/m^2	IV in 100ml N saline	over 15mins
Day 15	Bleomycin	10000U/m^2	IV bolus	stat
Day 15-19	Etoposide **	60mg/m^2	PO	od
Days 20-27	GCSF	5µg/kg	SC	od

Repeat cycle every 28 days for up to 6 cycles

***** Procarbazine - 50mg capsules
** Etoposide - 50mg and 100mg capsules

Prophylaxis for acute emesis	Ondansetron 8mg PO days 1 & 15
Prophylaxis for delayed emesis	Ondansetron 8-12hrly & metoclopramide 10-20mg 6-12hrly
Other medications	Allopurinol 300mg od for cycles 1-3
	Nystatin 1ml qds & Corsodyl 10ml qds
	Cotrimoxazole 480mg od throughout & for 2 weeks after

Dose modification for haematological toxicity

• Neutrophils > 2.0 & plats > 100	Give 100% dose
• Neutrophils 1.0 – 2.0 or plats 50-100	Delay 1 week
• Neutrophils remain 1.0-2.0 or plats 50-100 despite delay	Proceed at 50-75% dose (but 100% bleomycin & prednisolone) – *discuss with consultant*
• Neutrophils remain <1.0 or platelets <50	Further treatment may be inappropriate – *discuss with consultant*

Dose modification for neurological toxicity

• If grade 2 motor toxicity (*mild objective weakness interfering with function but not with activities of daily living*) or grade 3 sensory (*sensory loss or paraesthesia interfering with activities of daily living)*	Stop vinblastine**.**

Dose modification for pulmonary toxicity .

- Bleomycin should be stopped and pulmonary function testing performed if there are signs or symptoms of bleomycin pulmonary toxicity. *The consultant must be informed*. Bleomycin should be discontinued if diffusing capacity is <50% of predicted value.

Dose modification for cardiotoxicity

- If symptoms or signs of cardiac failure develop, the LVEF should be measured by MUGA scan.
  If LVEF <50% further VEPEM-B may be inappropriate – *discuss with consultant*

Dose modification for liver dysfunction (unless due to lymphoma)

• Bilirubin >50μmol/L	Reduce vinblastine, procarbazine & mitoxantrone by 50%

VEPEM-B Toxicities

Neutropenic sepsis & thrombocytopenia	Nausea (moderate) – but severe with alcohol & procarbazine
Mucositis	Interstitial pneumonitis & (late) pulmonary fibrosis
Alopecia	Anaphylaxis (rarely) & febrile reactions with bleomycin (maybe several hours later)
Cardiac arrythmias & cardiomyopathy	Pruritic erythema & hyperpigmentation (bleomycin)..
Peripheral neuropathy	Photosensitivity with procarbazine
Hyperglycaemia	Autonomic neuropathy – commonly constipation, ileus
Second malignancies (late)	

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