VCP

INDICATION (ICD10) C71, C72

1. Medulloblastoma and PNET following radiotherapy.
   PS 0, 1, 2

REGIMEN

Day 1	CISPLATIN 70mg/m^2 in 1000ml sodium chloride 0.9% infusion over 2 hours LOMUSTINE (CCNU) 75mg/m^2(maximum 200mg) orally single dose only
Days 1 and 8	VINCRISTINE 1.5mg/m^2 (maximum 2mg) in 50ml sodium chloride 0.9% IV infusion over 10 minutes

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 42 days for 6 cycles starting 6 weeks after radiotherapy.

ADMINISTRATION

Lomustine available as 40mg capsules
Take at night on an empty stomach

ANTI-EMETICS

High emetic risk day 1
Minimal emetic risk day 8
Patients may already be taking dexamethasone for raised intracranial pressure

CONCURRENT MEDICATION REQUIRED

Cisplatin	Ensure adequate pre and post hydration. If urine output is <100 ml/hour or if patient gains >2kg in weight during IV administration post cisplatin give 20-40 mg furosemide PO/IV.
Lomustine	Lorazepam 1mg single dose

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant
Vincristine - vesicant

Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E, Mg^{++} and LFTs and creatinine every 42 day cycle
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
GFR assessed using EDTA result or calculated creatinine clearance at the Consultant's discretion.
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Cisplatin	Nephrotoxicity – ensure adequate pre and post hydration is prescribed. Ototoxicity – assess patient for tinnitus or hearing abnormalities.
Lomustine	Myelosuppression
Vincristine	Neurotoxicity

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS
(not exhaustive list check SPC/BNF/Stockleys)

Cisplatin	Aminoglycosides increased risk of nephrotoxicity and ototoxicity. Renal function should be well monitored and audiometric tests as required. Cisplatin can cause a decrease in phenytoin serum levels. This may lead to reappearance of seizures and may require an increase of phenytoin dosages.

DOSE MODIFICATIONS
Haematological
Lomustine and cisplatin (not vincristine)
If neutrophils <1.5x10^9/l and platelets <100x10^9/l, delay 1 week or until count recovered then restart at 75% dose, then at 50% dose with further myelosuppression can be reduced further to 25% dose.

Non-haematological
Cisplatin
Significant neourotoxicity consider substituting with carboplatin

Vincristine

Epileptic seizure or ileus	Stop vincristine in this course, reduce to 1mg/m^2 next course. After recovery give vincristine at 100% dose.
Significant dysaethesia	Omit vincristine until recovery. muscle weakness or abdominal pain After recovery give vincristine at 100% dose

Hepatic impairment
Vincristine

Bilirubin 25-51 or AST 60-180u/L	give 50%
Bilirubin >51micromol/L and normal AST	give 50%
Bilirubin >51micromol/L and AST >180u/L	omit

Renal impairment
Cisplatin

GFR >60ml/min	give 100% dose
GFR 45-60ml/min	give 75% dose
GFR <45ml/min	Omit dose

Lomustine

CrCl >60ml/min	give 100%
CrCl 45-60ml/min	give 75%
CrCl 30-45ml/min	give 50%
CrCl <30ml/min	Not recommended

REFERENCES

1. Guidelines for the management of medulloblastoma following closure of the HIT-SIOP PNET 4 study. Version 2.0 (28-02-2007)
2. www.bnos.org.uk Adult PNET rare tumour guidelines