CISPLATIN ETOPOSIDE with concurrent RT (SCLC)

INDICATION (ICD10) C34, C53

1. First line treatment for SCLC with concurrent RT.
2. Localised small cell cervical cancer
   PS 0, 1, 2

REGIMEN

Day 1 Prehydration
CISPLATIN 75mg/m^2 in 1000ml sodium chloride 0.9% IV infusion over 2 hours
ETOPOSIDE 100mg/m^2 in 1000ml* sodium chloride 0.9% IV infusion over 60 minutes
Post hydration
Day 2 ETOPOSIDE 100mg/m^2 in 1000ml* sodium chloride 0.9% IV infusion over 60 minutes
Day 3 ETOPOSIDE 100mg/m^2 in 1000ml* sodium chloride 0.9% IV infusion over 60 minutes
*doses 48mg to 88mg in 250ml, doses 96mg to 180mg in 500ml sodium chloride 0.9%

Day 2 and 3 can be given orally ETOPOSIDE 200mg/m^2/day but is not recommended as oral absorption is variable (it may cause reduced efficacy or severe toxicity in patients), the intravenous route is preferred. However for logistical reasons the oral route may be necessary.

CYCLE FREQUENCY AND NUMBER OF CYCLES

Lung - every 21 days for 6 cycles (subject to tolerance and response)
Cervical – every 21 days for 4-6 cycles

ANTI-EMETICS

High emetic risk day 1
Low emetic risk days 2 and 3

CONCURRENT MEDICATION REQUIRED

Cisplatin	Ensure adequate pre and post hydration If urine output is <100ml/hour or if patient gains >2kg in weight during IV administration post cisplatin give 20-40 mg furosemide PO/IV.
GCSF	GCSF starting at least 24 hours after chemotherapy

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant
Etoposide - irritant

Peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E and LFTs every cycle
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Ideally EDTA GFR should be used
Creatinine clearance (GFR) calculated, at the Consultants discretion
Serum creatinine - each cycle,
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.

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. Carboplatin 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
Non-haematological
If patient complains of tinnitus, tingling of fingers and/or toes, discuss with SpR or Consultant before administration.

Hepatic impairment
Etoposide

Bilirubin ≥50micromol/L or decreased albumin	give 50% dose

Renal impairment
Cisplatin

GFR >60ml/min	give 100% dose
GFR 45-60ml/min	give 75% dose
GFR <45ml/min	not recommended

Etoposide

CrCl >50ml/min	give 100% dose
CrCl 15-50ml/min	give 75% dose
CrCl <15ml/min	Further dose reduction

REFERENCES
1. Evans WK et al. J Clin Oncol 1985; 3: 1471-1477. Roth BJ et al. J Clin Oncol 1992; 10: 282291