CISPLATIN (40) with concurrent RT

INDICATION (ICD10) C34, C49, C51, C52, C53

1. Unresectable stage IIIA/IIIB non-small cell lung cancer concurrently with radical radiotherapy after neoadjuvant chemotherapy with 2 cycles of cisplatin/vinorelbine.
2. Radical treatment of head and neck squamous cell carcinoma.
3. Advanced cervical, vulval and vaginal carcinoma.
   PS 0, 1, 2

REGIMEN

Day 1 Prehydration
CISPLATIN 40mg/m^2* in 1000ml sodium chloride 0.9% IV infusion over 1 hour
Post hydration

Cisplatin should be given as early as possible in the week as cisplatin potentiates the radiotherapy
*Head and neck patients cap dose at BSA 2.0 (maximum 80mg)
*Gynae patients cap dose at maximum 70mg

CYCLE FREQUENCY AND NUMBER OF CYCLES

Lung - every 7 days for 4 cycles
Head and neck - every 7 days for 6 cycles
Gynae – every 7 days, whilst having external bean radiotherapy, usually 5 cycles.

ANTI-EMETICS

Moderate emetic risk day 1

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 20-40mg furosemide PO/IV.

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant

Filter not required
Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E, Mg^{++} and LFTs every week
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
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. 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
Non-haematological
If patient complains of tinnitus, tingling of fingers and/or toes, discuss with SpR or Consultant before administration.

Renal impairment
Cisplatin

CrCl >60ml/min	give 100% dose
CrCl 50-59ml/min	give 75% dose
CrCl 40-49ml/min	give 50% dose (curative intent) not recommended (palliative intent)
CrCl <40ml/min	not recommended

REFERENCES
1. SchaakeKoning C *et al.* N Eng J Med 1992; 326: 524-530
2. Al-Sarraf, M. et al; JCO 1998; Vol 16 (4): 1310–1317
3. Bachaud, J et al; Int J Radiat Oncol Biol Phys 1996; 36 (5): 999-1004
4. Prosnitz, RG et al; Int J Radiat Oncol Biol Phys 2005; 61: 1087–1095