

CISPLATIN FLUOROURACIL (CF80)

INDICATION (ICD10) C44, C49

1. Palliative treatment of head and neck cancer. PS 0, 1, 2
2. Metastatic skin squamous cell carcinoma. PS 0-1 with co-morbidities or older patients (unlicensed)
3. Metastatic skin squamous cell carcinoma. PS ≥ 2 with no significant co-morbidities (unlicensed)

REGIMEN

Day 1 Prehydration
 CISPLATIN 80mg/m² in 1000ml sodium chloride 0.9% IV infusion over 2 hours
 Posthydration
 FLUOROURACIL 3200mg/m² over 96 hours via an infusor

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for up to 6 cycles

ANTI-EMETICS

Highly emetogenic day 1
 Low emetogenic risk days 2, 3 and 4

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.
Fluorouracil	Mouth and bowel support eg Loperamide, benzydamine mouthwash

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant
 Fluorouracil - inflammitant

Filter not required
 Central line

INVESTIGATIONS

Blood results required before SACT administration
 FBC, U&E. Mg⁺⁺ and LFTs every cycle
 Neutrophils x 10⁹/L ≥ 1.5
 Platelets x 10⁹/L ≥ 100
 Ideally EDTA GFR should be used
 Creatinine clearance (GFR) calculated, at the Consultants discretion
 Serum creatinine
 DPYD test
 Baseline weight and every cycle

MAIN TOXICITIES AND ADVERSE REACTIONS

Cisplatin	Nephrotoxicity – ensure adequate pre and post hydration is prescribed. Ototoxicity – assess patient for tinnitus or hearing abnormalities.
Fluorouracil	Palmar plantar (handfoot syndrome) causing red palms and soles – treat with pyridoxine 50mg tds Diarrhoea – treat with loperamide or codeine Cardiotoxicity – monitor cardiac function. Special attention is advisable in treating patients with a history of heart disease, arrhythmias or angina pectoris or those who develop chest pain during treatment with fluorouracil. Stomatitis

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.
Fluorouracil	Cimetidine slightly increases exposure to fluorouracil Metronidazole increased toxicity Phenytoin concentration increased Warfarin

DOSE MODIFICATIONS

Haematological

If neutrophils $<1.5 \times 10^9/L$ and/or the platelet count $<100 \times 10^9/L$ delay the second course by one week, recheck blood count.

If satisfactory ($>1.5 \times 10^9/L$ and $>100 \times 10^9/L$) give 75% dose cisplatin and fluorouracil

If not satisfactory delay by a further week and recheck blood count, if satisfactory ($>1.5 \times 10^9/L$ and $>100 \times 10^9/L$) then give 75% dose cisplatin and fluorouracil with G-CSF or at Clinician's discretion give 50% dose cisplatin and fluorouracil.

If still unsatisfactory after 2 week delay chemotherapy should usually be discontinued.

Non-haematological

Cisplatin

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

Hepatic impairment

Fluorouracil

Bilirubin $<85 \mu\text{mol/L}$ or ALT/AST <180	give 100% dose
Bilirubin $>85 \mu\text{mol/L}$ or ALT/AST >180	Not recommended

Renal impairment

Cisplatin

CrCl $>60 \text{ml/min}$	give 100% dose
CrCl 50-59ml/min	give 75% dose
CrCl 40-49ml/min	give 50% dose (curative intent) not recommended (palliative intent)
CrCl $<40 \text{ml/min}$	not recommended, switch to an appropriate carboplatin containing regimen



REFERENCES

1. Vermorken, JB et al; NEJM 2008; 359 (11): 1116-1127
2. Jarkowski, A et al; Am J Clin Oncol 2016; 39 (6): 545-548