GEMCITABINE CISPLATIN

INDICATION (ICD10) C23

1. Advanced cholangiocarcinoma gallbladder and ampullary cancer (unlicensed)
2. Unknown primary if appropriate (unlicensed)

PS 0, 1, 2

REGIMEN

Day 1 Prehydration
CISPLATIN 25mg/m^2 in 500ml sodium chloride 0.9% IV infusion over 60 minutes
GEMCITABINE 1000mg/m^2 in 250ml sodium chloride 0.9% (or licensed dose volume) IV infusion over 30 minutes
Posthydration

Day 8 Prehydration
CISPLATIN 25mg/m^2 in 500ml sodium chloride 0.9% IV infusion over 60 minutes
GEMCITABINE 1000mg/m^2 in 250ml sodium chloride 0.9% (or licensed dose volume) IV infusion over 30 minutes
Posthydration

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for 8 cycles

ANTI-EMETICS

Moderate risk days 1 and 8

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
Gemcitabine – neutral

No filters required
Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC every dose, U&E, LFTs and creatinine every 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.
Gemcitabine	Diarrhoea – see dose modifications, treat with ,loperamide or codeine Mucositis – see dose modifications, use routine mouthcare

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

Neutrophils >1.5x10^9/L and platelets >100x10^9/L	give 100% dose
Neutrophils 1.0-1.5x10^9/L or platelets <100x10^9/L	Discuss with consultant
Neutrophils <1.0x10^9/L or platelets <100x10^9/L	Day 1 delay treatment Day 8 platelets <100x10^9/L omit gemcitabine treatment, and consider giving 75% gemcitabine dose subsequent cycles

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

Hepatic impairment
Gemcitabine

Bilirubin >27µmol/L	initiate treatment with 80% dose

Renal impairment
Cisplatin

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

REFERENCES

1. J.W Valle et al; 2009 ASCO meeting Abstract 4503; J Clin Oncol 27:15s 2009(suppl;abstr 4503)
2. J.W Valle et al; ABC-02 trial; NEJM 8.4.10: Vol 362:1273-81