

MITOMYCIN FLUOROURACIL with concurrent radiotherapy

INDICATION (ICD10) C80

1. Bladder cancer with concurrent RT. PS 0, 1, 2

REGIMEN

Day 1 MITOMYCIN 12mg/m² (maximum 20mg) IV bolus
FLUOROURACIL 2500mg/m² IV infusion over 5 days
Day 22 FLUOROURACIL 2500mg/m² IV infusion over 5 days

CYCLE FREQUENCY AND NUMBER OF CYCLES

One cycle

ANTI-EMETICS

Low emetogenic risk

CONCURRENT MEDICATION REQUIRED

Fluorouracil	Mouth and bowel support eg Loperamide, benzydamine mouthwash Prophylactic antibiotics eg ciprofloxacin 250mg bd for 6 weeks during chemoradiotherapy and until skin reactions have settled
--------------	---

EXTRAVASATION AND TYPE OF LINE / FILTERS

Fluorouracil - inflammitant

Mitomycin - vesicant

Central line (single lumen)

INVESTIGATIONS

Blood results required before SACT administration

FBC, U&E and LFTs every cycle

Neutrophils x 10⁹/L ≥1.5

Platelets x 10⁹/L ≥100

Serum creatinine

ECG (possible ECHO) required if patient has preexisting cardiac disease

DPD test

Baseline weight and every cycle

MAIN TOXICITIES AND ADVERSE REACTIONS

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)

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

DOSE MODIFICATIONS

Mitomycin maximum lifetime dose = 60mg/m²

Fluorouracil

The fluorouracil course should be delayed for a week or until completely recovered in the event of either low blood counts (neutrophils <1.5x10⁹ or platelets <100x10⁹) or any persistent mucositis or diarrhoea.

Non-haematological toxicity (CTC grade): diarrhoea, stomatitis	0-1	2	3	4
Haematological toxicity (x10 ⁹ /L): Platelets ≥50 and neutrophils ≥1.0	100%	80%	50%	No further treatment
Haematological toxicity (x10 ⁹ /L): Platelets 25-49 or neutrophils 0.5-0.9	80%	70%	50%	No further treatment
Haematological toxicity (x10 ⁹ /L): Platelets <25 or neutrophils <0.5	50%	50%	50%	No further treatment

Hepatic impairment

Fluorouracil

Significantly impaired hepatic function eg bilirubin >50micromol/L may be a sign of disease progression and require cessation of, or change in, treatment. Always discuss deteriorating liver function with consultant.

Bilirubin >85micromol/L	not recommended
-------------------------	-----------------

Renal impairment

Fluorouracil

CrCl >30ml/min	Give 100% dose
CrCl <30ml/min	Consider dose reduction

Mitomycin

CrCl ≥30ml/min	give 100% dose
CrCl <30ml/min	not recommended

REFERENCES