MITOMYCIN FLUOROURACIL with concurrent radiotherapy

INDICATION (ICD10) C21
1. Anal cancer (unlicenced). PS 0, 1, 2

REGIMEN
Day 1	MITOMYCIN	12mg/m^{2}* (maximum 20mg) IV bolus
	FLUOROURACIL	4000mg/m^{2*} IV infusion over 96 hours
Day 29	FLUOROURACIL	4000mg/m^{2*} IV infusion over 96 hours

*Fluorouracil dose may be decreased to 3000mg/m^{2} and/or Mitomycin dose may be decreased to 10mg/m^{2} if >70 years based on clinical decision

CYCLE FREQUENCY AND NUMBER OF CYCLES
One cycle for duration of RT (5.5 weeks) only

ANTI-EMETICS
Low emetogenic risk

CONCURRENT MEDICATION REQUIRED
Fluorouracil	Mouth and bowel support eg Loperamide, benzydamine mouthwash Prophylactic antibiotics eg ciprofloxacin 250mg bd for 8 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 10^{9}/L ≥1.5
Platelets x 10^{9}/L ≥100
Serum creatinine
ECG (possible ECHO) required if patient has preexisting cardiac disease
DPD test
Baseline weight and every cycle

MAIN TOXICITES 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/m^2

Fluorouracil
The fluorouracil course should be delayed for a week or until completely recovered in the event of either low blood counts (neutrophils <1.5x10^9 or platelets <100x10^9) 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
Fluourouracil

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