MITOMYCIN C + 5-FLUOROURACIL + RADIOTHERAPY

Cancer of the vulva in patients not fit for cisplatin: treatment of residual disease after surgery; for close resection margins > 1 node positive; local recurrence not amenable to surgery

Drug/Dosage:	5-Fluorouracil	1000mg/m^2/24hr	IV	D1 - D4 of Week 1 and Week 5
	Mitomycin C	12mg/m^2	IV	D1 **of Week 1 only**
	Patients aged > 70 years, or those with significant co-morbidities:			
	5-Fluorouracil	750mg/m^2/24hr	IV	D1 – D4 of Week 1 and Week 5
	Mitomycin C	10mg/m^2	IV	D1 of Week 1 only

Radiotherapy: Radiotherapy is delivered over 5 – 6 weeks on weekdays only, with concurrent chemotherapy during the first and fifth week.
It is stressed that Week 5 of RT must be accompanied by the second course of 5FU.

Administration: Mitomycin C via fast running infusion of 0.9% sodium chloride.
5FU is to be started at least 2 hours prior to first fraction of RT.
5FU continuous IV infusion over 4 days, given via CVC and ambulatory infusion device.

Frequency: a single course of treatment, over 5 – 6 weeks
clinical review weekly

Main toxicities: myelosuppression; mucositis; diarrhoea; palmar/plantar erythema; coronary artery spasm (see Comments); haemolytic uraemic syndrome; severe skin soreness/radiation fibrosis; urinary frequency/cystitis; ovarian failure/infertility

Anti-emetics: moderately emetogenic

Extravasation: mitomycin C is a vesicant

Regular Investigations:	FBC	weekly
	LFTs	Day 1 of Week 1 & Day 1 of Week 5
	U&Es	Day 1 of Week 1 & Day 1 of Week 5

Comments: Maximum cumulative dose of Mitomycin C = 28mg/m^2 or 56mg total dose.

Haemolytic uraemic syndrome is a complication of Mitomycin C. Therefore, monitor renal function carefully and request Red Cell Fragments on peripheral blood films if in doubt.

Coronary artery spasm is a recognised complication of 5FU although the evidence base regarding aetiology, management and prognosis is not particularly strong. The incidence is estimated to be between 2% and 18%. Coronary artery spasm is more common in patients receiving continuous infusions of 5FU, and is usually reversible on discontinuing the infusion. Should a patient receiving 5FU present with chest pains, stop the 5FU. Standard investigation and treatment of angina may be required. If re-challenge is deemed necessary, this can be performed under close supervision, but should symptoms redevelop, the 5FU should be withdrawn permanently.[1] Refer to Consultant to discuss.

Reason for Update: peripheral administration removed	Approved by Consultant: Dr S Essapen
Version: 2	Approved by Lead Chemotherapy Nurse: V Mumford
Supersedes: Version 1	Date: 30.12.13
Prepared by: S Taylor	Checked by: C Tucker

Dose Modifications

Haematological Toxicity:

WBC < 3.0 x 10^9/l
or
Neutrophils < 1.5 x 10^9/l
or
Platelets < 100 x 10^9/l

NB. Chemotherapy must not be delayed without Consultant approval. Clinical decision for individual situation. If appropriate, proceed, followed by G-CSF support starting on day after 5FU infusion completed. If in doubt, discuss with Consultant.

Renal Impairment:

CrCl (ml/min)	Mitomycin C Dose
> 10	Give 100%
< 10	Give 75%

Hepatic Impairment:

Moderate hepatic impairment	Reduce initial 5FU dose by 1/3
Severe hepatic impairment	Reduce initial 5FU dose by ½

Dose can be increased if no toxicity seen. If in doubt, check with the relevant Consultant

Other Toxicities: If Grade 3 mucositis, PPE or diarrhoea occurs, the dose of 5FU should be reduced to 750mg/m^2/24hrs for the second 4-day 5FU infusion.
For any Grade 4 toxicity, discuss with Consultant before proceeding.

References: Han, SC et al; Int J Radiat Oncol Biol Phys 2000; 47 (5): 1235 - 1244
[1]COIN Guidelines Oct 2000