**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/m²/24hr IV D1 - D4 of Week 1 and Week 5
- **Mitomycin C**: 12mg/m² IV D1 of Week 1 only

**Patients aged > 70 years, or those with significant co-morbidities:**
- **5-Fluorouracil**: 750mg/m²/24hr IV D1 – D4 of Week 1 and Week 5
- **Mitomycin C**: 10mg/m² 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/m² 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is deemed necessary, this can be performed under close supervision, but should symptoms redevelop, the 5FU should be withdrawn permanently. Refer to Consultant to discuss.
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:

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<tr>
<th>CrCl (ml/min)</th>
<th>Mitomycin C Dose</th>
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<tr>
<td>&gt; 10</td>
<td>Give 100%</td>
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<tr>
<td>&lt; 10</td>
<td>Give 75%</td>
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Hepatic Impairment:

- Moderate hepatic impairment: Reduce initial 5FU dose by 1/3
- Severe hepatic impairment: Reduce initial 5FU dose by 1/2

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.

1 COIN Guidelines Oct 2000