

## Chemotherapy protocol

### **Drug regimen**

Mitomycin C and 5-Fluorouracil with concurrent radiotherapy

### **Indications for use**

Anal carcinoma

### **Regimen**

#### Day 1 only

Mitomycin C 12mg/m<sup>2</sup> bolus  
(max dose 20mg)

#### Day 1 to 4 and 29 to 32

5-Fluorouracil 1000mg/m<sup>2</sup>/day in a continuous infusor for 4 days

WITH CONCURRENT RADIOTHERAPY

### **Investigation prior to initiating treatment**

FBC, LFT, U&Es, Bone, Creatinine clearance

**Dihydropyrimidine dehydrogenase (DPD) deficiency can result in severe toxicity secondary to reduced fluorouracil metabolism (this can present as severe diarrhoea and/or severe stomatitis early in the first cycle). Patients require DPD testing prior to administration. Dose adjustments should be made in accordance with local DPD policy.**

### **Investigations and consultations prior to each cycle**

FBC weekly

U&Es and LFTs weekly

Consultation every week in radiotherapy department

### **Acceptable limits for treatment to proceed**

(if outside these delay one week or contact consultant)

Acceptable blood range: haemoglobin  $\geq 120$ g/l, neutrophils  $\geq 1.5 \times 10^9$ /l, platelets  $\geq 100 \times 10^9$ /l,

If Hb  $< 120$  g/l proceed but arrange blood transfusion

If neutrophils  $1.2 - 1.5 \times 10^9$ /l, contact consultant

If platelets  $< 100 \times 10^9$ /l, contact consultant

If U&Es abnormal contact consultant

### **Side Effects**

Sore mouth, nausea/sickness, pain in abdomen, diarrhoea, skin reaction, conjunctivitis, myelosuppression, neutropenia, thrombocytopenia, cardiac toxicity, ocular toxicity, interstitial lung disease, HUS, diarrhoea and constipation, fatigue, mild alopecia.

## **Dose Modification Criteria**

### **Renal impairment**

<b>CrClearance (mL/min)</b>	<b>Mitomycin C (day 1 only)</b>	<b>Fluorouracil</b>
≥60	100% dose	100% dose
10-59	75% dose	100% dose
<10	50% dose or omit	Consider dose reduction

### **Hepatic impairment**

<b>Bilirubin (x ULN)</b>		<b>ALT (xULN)</b>	<b>Mitomycin C Day 1 only</b>	<b>Fluorouracil</b>
≤1.5	and	≤1.5	100% dose	100% dose
1.5 – 2.9	or	1.5-2.9	100% dose	67% dose*
3- 5	or	3-5	100% dose	50% dose*
>5	or	>5		contraindicated

\*fluorouracil doses may be increased to 100% if no further toxicity

### **Other toxicities**

<b>Toxicity</b>	<b>Definition</b>	<b>Dose adjustment</b>
Stomatitis/Mucositis	Grade 2	Reduce all subsequent fluorouracil to 75% dose
	Grade 3	Reduce all subsequent fluorouracil to 50% dose
	Grade 4	Discontinue all treatment
Diarrhoea*	Grade 2	Reduce all subsequent fluorouracil to 75% dose
	Grade 3	Reduce all subsequent fluorouracil to 50% dose
	Grade 4	Discontinue all treatment
Palmar Plantar Erythrodysesthesia	Grade 2	Reduce all subsequent fluorouracil to 75% dose
	Grade 3/4	Reduce all subsequent fluorouracil to 50% dose
Haemolytic Uraemic Syndrome (HUS)	Microangiopathic haemolytic anaemia, renal failure, thrombocytopenia and hypertension. More common with cumulative doses of mitomycin C >36mg/m <sup>2</sup> If suspected test for red cell fragmentation Discuss with renal team Consider prednisolone 30mg OD for 7 days to prevent worsening haemolysis	

\*monitor patients with diarrhoea until symptoms completely resolved as rapid deterioration may occur.

## **Specific Information on Administration**

- PICC line required
- Mitomycin C is given as a bolus injection and is vesicant, avoid extravasation
- 5-Fluorouracil should be administered as a 24 hour infusion
- The infusion should commence 2 hours prior to the first fraction of radiotherapy
- Hb must be maintained at 120 g/l. If Hb low proceed with chemotherapy but arrange for transfusion within 2 working days

**THIS PROTOCOL HAS BEEN DIRECTED BY DR WILLIAMSON, CLINICIAN FOR ANAL CANCER**

**RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE**

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