



Anti-Emetic Guidelines For Chemotherapy Patients

Version No:

2

(NOTE: These Guidelines Are In Accordance With Those Used At Christchurch Hospital)

1. Risk Factors for Acute Emesis

The potential for acute emesis (emesis occurring within the first 24 hours of treatment) can be predicted through identification of the following risk factors:

Patient Characteristics:

Low Risk Of Emesis	High Risk Of Emesis
<ul style="list-style-type: none"> • Males • Past history of heavy alcohol consumption • Older patients 	<ul style="list-style-type: none"> • Females • Past history of low alcohol consumption • Younger patients • Poor emesis control with previous chemotherapy

Chemotherapeutic Agents:

Mildly Emetogenic	Moderately Emetogenic	Highly Emetogenic
Fluorouracil Methotrexate Vincristine Vinblastine Vinorelbine Bleomycin Paclitaxel Gemcitabine	Low dose Cyclophosphamide Doxorubicin Daunorubicin Epirubicin Ifosfamide Irrinotecan Carboplatin Mitomycin C Aspariginase Mitoxantrone Methotrexate ($100-200\text{mg}/\text{m}^2$) Docetaxol Topotecan	Cyclophosphamide ($>1\text{G}/\text{m}^2$) Doxorubicin (<i>doses $>75\text{mg}/\text{m}^2$ in combination</i>) Etoposide Cisplatinum DacarbaZine (<i>DTIC</i>) Carmustine (<i>BCNU</i>) Dactinomycin Methotrexate ($>200\text{mg}/\text{m}^2$) Oxaliplatin



Anti-Emetic Guidelines For Chemotherapy Patients

Version No:

2

1. Pre-Treatment:

Code	Emetogenicity	Drug	Dose	Frequency	Route
A	Mild	Metoclopramide	10-20mg	Stat	Oral
B	Moderate	Ondansetron <i>or</i>	8mg	Stat	Oral (1hr pre treatment)
		Ondansetron	8mg	Stat	Oral (1hr pre treatment)
		Dexamethasone	8mg	Stat	IV infusion/bolus
C	Severe	Ondansetron	8mg	Stat	Oral (1hr pre treatment)
		Dexamethasone	8mg	Stat	IV infusion/bolus
D	Very Severe	Ondansetron	16mg	Stat	Oral (1hr pre treatment)
		Dexamethasone	8mg	Stat	IV infusion/bolus
		Lorazepam	1mg	Stat	Oral

2. Post-Treatment:

Code	Emetogenicity	Drug	Dose	Frequency	Route
A	Mild	Metoclopramide	10-20mg	QDS prn	Oral
B	Moderate	Metoclopramide	10mg	QDS (2 days then prn)	Oral
		Ondansetron	8mg	BD (repeat 12 hrly for 2 further doses post chemo)	Oral
C	Severe	Metoclopramide	10-20mg		Oral / IV
		Ondansetron	8mg	QDS (2 days then prn)	Oral / IV
		Dexamethasone	4mg	BD (repeat 12 hrly for 2 further doses post chemo)	Oral / IV
		Dexamethasone	2mg	BD (2 days then prn)	Oral / IV
				BD (2 days only)	
D	Very Severe	Metoclopramide	10-20mg	QDS (2 days then prn)	Oral / IV
		Ondansetron	8mg	BD (repeat 12 hrly for 2 further doses post chemo)	Oral / IV
		Dexamethasone	4mg		Oral / IV
		Dexamethasone	2mg		Oral / IV
		Lorazepam	0.5mg-1mg		Oral



2. Notes

- Each chemotherapy regime should have the anti-emetic regime specified for both pre and post chemotherapy emesis control.
- The anti-emetic guidelines should be used in a stepwise manner moving down one row where it is warranted by treatment failure. (e.g. for CAF chemotherapy choose '2B' – first line, if this fails move to '2C' and then to '2D' if warranted.
- Dexamethasone should be routinely given IV pre chemotherapy and should also be given routinely post highly emetogenic chemotherapy – recommended maximum 8mg per day. Where patients are intolerant of steroids or are on high dose prednisolone following chemotherapy - Dexamethasone should be omitted.
- At biologically equivalent doses, oral anti-emetics have been found to be equally effective, *therefore ondansetron should only be used IV if the patient is experiencing severe nausea/vomiting.*
- High doses of metoclopramide are indicated for patients receiving chemotherapy - however patients should be monitored for signs of a dystonic reaction. Dystonic reactions occur in about 1% of patients receiving metoclopramide. Younger patients and females are more susceptible, and up to 30% of patients under 30 may experience dystonia. This may take various forms – oculogyric crisis, trismus, torticollis, opisthotonus or muscle trembling. Some patients also report less dramatic side effects such as anxiety, agitation, restlessness and feelings of doom.
- Metoclopramide may be replaced by domperidone (*10 – 20mg QDS orally*) in patients on other dopamine antagonists or those prone to extra-pyramidal side-effects.
- Oral Lorazepam 0.5 – 2mg may be helpful for anticipatory / anxiety induced nausea and vomiting. A dose of 0.5 – 1mg may be repeated 4 – 6 hourly with appropriate monitoring.
- Where possible, ondansetron should be charted on an outpatient prescription for take-home medication. Government subsidies are currently available.
- If patients are experiencing severe vomiting whilst continuing to receive chemotherapy, ondansetron may be administered 8mg / 8hrly for a period of 24 hours.
- If ondansetron is not successful, it may be helpful to change to tropisetron 5mg - an alternative 5HT₃ antagonist.
- Patients continuing to vomit 24 hours post-administration of chemotherapy need to be assessed for hydration. Alternative anti-emetics i.e. cyclizine, haloperidol or prochlorperazine should be considered.



Anti-Emetic Guidelines For Chemotherapy Patients

Version No:

2

3. Nursing Actions for Nausea and Vomiting

1. Provide information to the patient regarding their particular drug regime. Not all cytotoxics cause vomiting and if they do the effect is variable.
2. Provide an appropriate anti-emetic regime based on the drugs being given and patient's previous experience. Consider changes in dosage, administration and type of anti-emetic if necessary, in consultation with medical staff. Anti-emetics should be given prior to chemotherapy and for at least 3-days following treatment if delayed nausea and vomiting are expected (as with cisplatin).
3. Give psychological support to prevent and reduce the stress of anticipatory nausea and vomiting. The use of lorazepam can be helpful as it reduces anxiety and has an amnesic effect.
4. Eat little and often. Avoid spicy foods and increase intake of high protein drinks if tolerated. Fizzy drinks are often tolerated. Ginger ales and ginger beer can be useful in managing nausea.

4. References

Gralla, R J et al (1999). Recommendations For The Use Of Anti-emetics: Evidence-based Clinical Practice Guidelines. Journal of Clinical Oncology. Vol 17 (9) 2971-2994

Revision History	Version:	2
	Developed By:	Glynnis James – Oncology Nurse
	Authorised By:	Director of Nursing
	Date Authorised:	September 2006
	Date Last Reviewed:	October 2008
	Date Of Next Review:	October 2010