## **CISPLATIN**

Used in relapsed ovarian cancer for patients who cannot tolerate carboplatin, usually due to allergic reactions

Drug/Dosage: Cisplatin 70 - 75mg/m<sup>2</sup> IV Day 1

(dose according to Consultant preference)

Administration: 1 litre 0.9% Sodium Chloride + 20mmol KCl + 10mmol MgS0<sub>4</sub> IV over 2 hours

Mannitol 20% 100ml IV over 15 minutes

Cisplatin in 1 litre 0.9% Sodium Chloride IV over 3 hours

1 litre 0.9% Sodium Chloride + 20mmol KCl + 10mmol MgS0<sub>4</sub> IV over 2 hours

500ml Sodium Chloride 0.9% IV or 500ml water orally over 1 hour

Frequency: Every 3 weeks for 6 cycles

Review after 3 cycles

Main Toxicities: myelosuppression; nephrotoxicity; neuropathy / ototoxicity;

ovarian failure/infertility

Anti-emetics: Highly emetogenic

Extravasation: Non - vesicant

Regular FBC Day 1 Investigations: U&Es Day 1

 $Mg^{2+}$  and  $Ca^{2+}$  Day 1 LFTs Day 1 CA 125 Day 1

EDTA Prior to 1<sup>st</sup> cycle

Comments: For patients on Cycle 1 whose EDTA is not yet available, Cockcroft and Gault may

be used to predict GFR. Cisplatin dose should be adjusted according to EDTA on subsequent cycles. EDTA should only be repeated if the result is borderline or if

there is a 30% change in serum creatinine

Check electrolytes – additional supplementation of magnesium, calcium or

potassium may be required.

Weight should be recorded prior to and at the end of cisplatin treatment, and a strict fluid balance chart should be maintained. An average urine output of at least 100ml/hr must be maintained throughout treatment, and cisplatin infusion should not be commenced unless this urine output is achieved. If the urine output is inadequate, the patient should be assessed and urine output increased by administering 500ml Sodium Chloride +/- furosemide 20 - 40mg. Furosemide 20 - 40mg po may also be given if there is a positive fluid balance of 1.5 litres, a weight gain of 1.5kg or symptoms of fluid overload. The patient should be asked to drink 2 litres of fluid in the 24hrs following treatment, and to contact the hospital if this is impossible because of problems e.g. nausea and vomiting.

| Reason for Update: New protocol due to repeated one-off use in | Approved by Matron: I Patterson      |
|--|--------------------------------------|
| patients allergic to carboplatin                               |                                      |
| Version: 1   | Approved by Consultant: Dr S Essapen |
| Supersedes: None   | Date: 6.8.06                         |
| Prepared by: S Taylor  | Checked by: S Punter                 |

## **Dose Modifications**

Hae matological

WBC  $< 3.0 \times 10^9/1$ 

Toxicity:

or  $\frac{10^9}{10^9}$ 

Delay 1 week.

Neutrophils  $< 1.0 \times 10^9/1$ 

Repeat FBC – if within normal parameters,

or

Platelets  $< 100 \times 10^{9}/1$ 

proceed with 100% dose.

If patient has repeated delays, consideration can be given to a dose reduction.

Renal Impairment:

NB. Cisplatin is both eliminated primarily (>90%) in the urine and is itself nephrotoxic.

| GFR (ml/min) | <b>Cisplatin Dose</b>     |
|--------------|---------------------------|
| > 60         | Give 100%                 |
| 50 - 60      | Give 75%                  |
| 40 – 50      | Give 50%                  |
| < 40         | CI (consider carboplatin) |

Neurotoxicity:

If patient develops Grade 2 neuropathy or ototoxicity, discuss with Consultant.

References:

No cisplatin dose equivalent to carboplatin AUC 5 is available in the literature. However, cisplatin and carboplatin are considered equally effective, as shown in the following reference:

Advanced Ovarian Cancer Trialists' Group: Chemotherapy in advanced ovarian cancer: four systematic meta-analyses of individual patient data from 37 randomised trials; British Journal of Cancer (1998); 78 (11): 1479 – 1487

| Reason for Update: New protocol due to repeated one-off use in | Approved by Matron: I Patterson      |
|--|--------------------------------------|
| patients allergic to carboplatin                               |                                      |
| Version: 1   | Approved by Consultant: Dr S Essapen |
| Supersedes: None   | Date: 6.8.06                         |
| Prepared by: S Taylor  | Checked by: S Punter                 |