Single agent Carboplatin for Stage I High Risk Seminoma

Indication: First line Adjuvant therapy for Stage I seminoma of the testis

Regimen details: Carboplatin AUC 7 IV D1 (see Comments)

Administration: Carboplatin in 500mls Glucose 5% IV over 30 – 60 minutes
Any device containing aluminium that may come in contact with Carboplatin must be avoided

Frequency: One cycle only (Single dose)

Extravasation: Carboplatin: Non- vesicant

Anti- emetics: Carboplatin: Moderate emetogenic
Follow Local Anti-emetic Policy

Regular investigation: FBC D1
LFTs D1
U&Es D1
AFP, BHCG, LDH D1
EDTA Prior to 1st cycle (see Comments)

Comments: Carboplatin: The total dose should be calculated in milligrams, using the Calvert formula
Dose= Target AUC x (25 + GFR)
GFR should be measured before the first cycle, by EDTA clearance.
Do not use Cockcroft and Gault formula to calculate creatinine clearance
Do not use this protocol if AFP or BHCG levels are raised.

DOSE MODIFICATIONS

Haematological toxicity

WBC ≥ 3.0 x 10⁹/L and
Neutrophils ≥ 1.0 x 10⁹/L and
Platelets ≥ 100 x 10⁹/L

Proceed with Carboplatin therapy

Renal Impairment Carboplatin is contra-indicated if GFR < 20ml/min.

Hepatic Impairment Carboplatin: No dose adjustment required

Toxicities: Myelosuppression with risk of sepsis and thrombocytopenia; fatigue; nausea; vomiting; mucositis; dysgeusia; nephrotoxicity; peripheral neuropathy; ototoxicity including tinnitus and high frequency hearing loss; hypersensitivity reactions
Drug interactions: Carboplatin:

- Aminoglycoside antibiotics: increased risk of nephrotoxicity and ototoxicity
- Clozapine: increased risk of agranulocytosis, avoid concomitant use
- Diuretics: increased risk of nephrotoxicity and ototoxicity
- Nephrotoxic drugs: increased nephrotoxicity; not recommended
- Phenytoin: reduced absorption of the antiepileptic
- Warfarin: increased anticoagulant effect of warfarin

References:

www.medicines.org.uk
Oliver RT et al. Lancet (2005); Vol 366: 293-300
SWSHCN- Approved Network Regimen for Seminoma. December 2007
GSTT guidelines for treating nausea and vomiting in adult patients. September 2007
UCLH- Dosage Adjustment for Cytotoxics in Renal Impairment. November 2003
UCLH- Dosage Adjustment for Cytotoxics in Hepatic Impairment. November 2003
CTCAE v3.0. August 2006