North West Coast
Strategic Clinical Networks

Etoposide/Cisplatin

INDICATION:

Small Cell Lung Cancer Limited Stage in patients with performance status 0-1

Small Cell Carcinoma of other primary site where cure is possible

Prior to a course of chemotherapy

- Baseline bloods: FBC, U&E, LFT inc LDH, Ca
- Creatinine clearance (Cockcroft-Gault formula) ≥ 60ml/min
- CT thorax/upper abdo (or imaging other anatomic site as appropriate)
- If appropriate discuss need for contraception and risk of infertility (offer sperm banking for males)
- Written informed consent for course

Prior to each cycle

- FBC, U&E, LFT, Ca
- CXR
- Creatinine clearance ≥ 50ml/min
- Medical review

Etoposide	**120mg/m^2***	**In 1 litre 0.9% sodium chloride over 1 hour IV**	**Day 1 –3***
		Potassium chloride 20mmol & magnesium sulphate 10mmol in 1 litre 0.9% sodium chloride over 2 hours	**Day 1**
Cisplatin	**80mg/m^2**	**In 1 litre 0.9% sodium chloride over 2 hours IV**	**Day 1**
		Potassium chloride 20mmol & magnesium sulphate 10mmol in 1 litre 0.9% sodium chloride over 2 hours	**Day 1**

Repeat every 21 days for 4-6 cycles

***Oral Etoposide can be used on day 2+3 at dose of 240mg/m2 (rounded to nearest 50)**

Consider antibiotic prophylaxis with Levofloxacin or Ciprofloxacin day 7-17

Dose modification for haematological toxicity	
• Neutrophils > 1.5 AND Platelets > 100	Proceed with full dose
• Neutrophils 1.0-1.5	Discuss with consultant
• Neutrophils < 1.0 OR Platelets < 100	Defer 1 week or until recovery If there has been a dose delay or an episode of neutropenic fever, consider G-CSF prophylaxis
Dose modification for neurological toxicity	
• NCI grade 0-2	Proceed with full dose

• NCI grade 3+	Replace Cisplatin with Carboplatin AUC5 (Calvert formula)*

Dose modification for any other toxicity (except alopecia)

• Grade 3+	Wait until recovery, then consider dose reduction for Etoposide and Cisplatin by 20%

Expected toxicities

Neutropenic sepsis & thrombocytopenia	Nausea & vomiting (severe)
Tinnitus	Peripheral neuropathy
Alopecia	Mucositis

Special considerations:

This treatment can be given concurrently with thoracic radiotherapy with the radiotherapy starting with cycle 2 or 3 of chemotherapy. In this case the radiotherapy should start within 6 hours of Cisplatin infusion.

Alternatively thoracic consolidation radiotherapy will be given after completion of chemotherapy

Patients who achieved a response to chemotherapy should be considered for prophylactic cranial irradiation

Formulae:
Calvert formula: (Cl_{Cr} (ml/min) + 25) x AUC

N.B. The Calvert formula is not considered reliable if the creatinine clearance is <40 ml/min. However, prescribing according to surface area leads to excessive doses. Therefore, even in those patients with renal impairment the Calvert formula will be used and doses modified subsequently up or down depending on blood counts.

Cockcroft-Gault

Female $\frac{(140 - \text{age[yrs]}) \times \text{wt[kg]}}{\text{Serum creatinine [micromol/l]}} \times 1.04$

Male $\frac{(140 - \text{age[yrs]}) \times \text{wt[kg]}}{\text{Serum creatinine [micromol/l]}} \times 1.23$

This protocol has been reviewed by the Lancashire & South Cumbria Lung Oncology Consultants' Group and responsibility for the protocol lies with the Head of Service.

Date: **March 2017**
Next review: **March 2019**