Subcutaneous Cytarabine in Acute Myeloid Leukaemia

Indication: Acute Myeloid Leukaemia (AML) > 60 years and / or not fit for intensive therapy

Regimen details: Cytarabine 20mg SC Every 12 hours Days 1 to 10

Administration*: Cytarabine administered by SC injection every 12 hours, into the thigh or abdomen

Frequency: Every 4-6 weeks, for at least 4 cycles

Extravasation: Cytarabine: Non-vesicant

Anti- emetics: Low emetogenic
Follow local anti-emetic policy

Supportive medication: Allopurinol or Rasburicase, when appropriate, for prevention of tumour lysis syndrome for first cycle only. Follow local policy

Regular investigations: FBC D1 and as indicated
LFTs D1
U&Es D1

Comments: *Subcutaneous Cytarabine maybe administered in the out-patient setting providing 12 hourly administration can be arranged. For patients to receive this care in the community there must be clear arrangements for medical authorisation, support, problem-solving and emergency action between community services and the referring hospital

DOSE MODIFICATIONS

Haematological Toxicity Cycle 1: No dose modifications

Subsequent cycles:
Commence the next cycle when neutrophil recovery i.e. > 1.0 x 10⁹/L

Renal Impairment: No dose modifications

Hepatic Impairment: Cytarabine dose needs to be reduced as per table below. Escalate dose in subsequent cycle in the absence of toxicity

<table>
<thead>
<tr>
<th>Bilirubin (µmol/L)</th>
<th>Cytarabine Dose</th>
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<tbody>
<tr>
<td>≤ 34</td>
<td>Give 100%</td>
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<tr>
<td>&gt; 34</td>
<td>Give 50%</td>
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Toxicities: Myelosuppression; nausea; vomiting; mucositis; stomatitis
References:

www.medicines.org.uk
AML 16 trial, MRC Feb 2011
SWSHCN-Network Approved Regimen for Cytarabine subcutaneous. March 2011
GSTT guidelines for treating nausea and vomiting in adult patients.Sept 2007
SELCN Cytotoxic Extravasation Guidelines. May 2009
UCLH- Dosage Adjustment for Cytotoxics in Renal Impairment. Jan 2009
UCLH- Dosage Adjustment for Cytotoxics in Hepatic Impairment. Jan 2009
CTCAE v 3.0. August 2006