4.08 Protocol name: Cladribine Subcutaneous injection

Indication
- Hairy cell leukaemia (HCL) or hairy cell leukaemia variant (HCL-v)
- Other indolent lymphoproliferative disorders

Pre-treatment Evaluation
- Morphology of blood and bone marrow aspirate. Trephine biopsy and ‘roll preparations’ should be made if the aspirate is difficult.
- Immunophenotyping of peripheral blood (flow cytometry)
- Cytogenetic analysis, usually on bone marrow. FISH analysis for common translocations and mono/trisomies may be useful.
- Physical examination
- CT, Abdomen
- CXR.
- ECG.
- ECHO ?
- FBC and blood film.
- Renal/liver/bone panel, LDH, CRP, uric acid, serum glucose.
- U&E
- Document WHO performance status of patient...
- Document height, weight and body surface area...
- Give adequate verbal and written information for patients and relatives concerning patient’s disease, treatment strategy and side effects.
- Obtain written consent from patient or guardian.
- If appropriate, discuss the possibility of pregnancy with female patients of child-bearing age and the need for contraception with both male and female patients.
- If appropriate, discuss potential risk of infertility with patient and relatives.

<table>
<thead>
<tr>
<th>Days</th>
<th>Drug</th>
<th>Dose</th>
<th>Administration</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 to D5</td>
<td>Cladribine</td>
<td>0.14mg/kg/day</td>
<td>Subcutaneous bolus</td>
<td>Give in 2 divided doses</td>
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May cap the total daily dose at 10mg.
Cycle Frequency / Treatment Duration

Usually only one 5 day course is given but can be repeated once, after 28 days if required.

Dose Modifications

Cladribine in contraindicated in patients with moderate to severe renal impairment (creatinine clearance £ 50 ml/min), or with moderate to severe hepatic impairment (Child-Pugh score ≥ 4).

Investigations prior to subsequent cycles

- U&E
- FBC and blood film.
- Renal/liver/bone panel, LDH, CRP, uric acid, serum glucose

Concurrent Medication

- Adequate hydration.
- Allopurinol 100mg daily from day 1, and continued until at least day 14. May increase to 300mg daily if serum uric acid is elevated.
- Consider antimicrobial and antifungal prophylaxis as per local protocol.
- PCP prophylaxis is recommended for 3 months after treatment completed. To be started on completion of cladribine to avoid drug rashes.
- Consider Acyclovir antiviral prophylaxis if previous history of VZV or HSV reactivation

Anti-emetics

This regimen had low emetic potential – refer to local protocol

Adverse effects

Cladribine causes profound myelosuppression needing infusions of blood products.

** Issue patient with DOH/National Blood Service Irradiated Blood Products information sheet: All cellular blood components should be irradiated indefinitely **

Other adverse effects include: headache, dizziness, constipation, diarrhoea, injection site reactions, fever, fatigue, chills, asthenia
References

- Saven et al, Blood 1998 (92) 1918-1926
- Cladribine SPC

Patient information

http://www.cancerbackup.org.uk/Treatments/Chemotherapy/Individualdrugs/Cladribine

http://emc.medicines.org.uk/medicine/20596/XPI0/LITAK+2mg+ml+solution+for+injection/

http://www.cancerbackup.org.uk/Cancertype/Leukaemia/Hairycellleukaemia

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