CLADRIBINE (2-chlorodeoxyadenosine)

INDICATION: Hairy cell leukaemia, lymphoplasmacytic lymphoma, myelofibrosis

Prior to a course of treatment

- Check creatinine clearance if serum creatinine is raised or > 60 years old. *See dose modification*
- Check FBC, LFTs
- Blood and platelet transfusions must be irradiated indefinitely - *inform transfusion lab*
- If appropriate discuss possibility of pregnancy with female patients and need for contraception with both male and female patients. Discuss potential for infertility - offer semen cryopreservation to male patients.
- Written consent for course

Intravenous cladribine:		
1) Cladribine	0.09mg/kg/day by continuous IV infusion in 0.5L N saline	for 7 days
2) Cladribine	0.12mg/kg/day IV in 0.5L N saline over 2 hours	for 5 days
3) Cladribine	0.14mg/kg IV once a week in 0.5L N saline over 2 hours	for 6 weeks
Subcutaneous cladribine (Litak)		
1) Cladribine	0.14mg/kg SC daily	5 days
A maximum of two courses are given		

Prophylaxis for acute emesis	None required
Prophylaxis for delayed emesis	Metoclopramide for 3-4 days
Other medications	Cotrimoxazole 480mg od until lymphocytes > 1.0
	Acyclovir 400mg bd until lymphocytes > 1.0
	Allopurinol 300mg od for 7 days
	Other anti-infective prophylaxis according to local policy

Dose modification for haematological toxicity and infection

- Pancytopenia with first cycle is due to marrow infiltration – there are no dose modifications for this
- Delay subsequent cycles until neutrophils $\geq$ 1.0
- Patient must be monitored closely and infection must be treated promptly
- Give blood product support as necessary
- If there is neutropenic sepsis despite use of GCSF consider using 60% dose - *discuss with consultant*

Dose modification for renal impairment

- There is limited information and it is a clinical decision whether to modify treatment.
- If Cr.Cl<30-60ml/min consider using 60% dose e.g reduce course from 5 to 3 days. If Cr.Cl <30ml/min cladribine may be contraindicated - *discuss with consultant*

Dose modification for liver dysfunction

- Limited information – clinical decision

Cladribine Toxicities

Neutropenic sepsis	Nausea (moderate-severe)
Thrombocytopenia	Amenorrhoea & infertility (offer cryopreservation)
Fever *	Opportunistic infection
Rash	Headache
Local injection site reactions	

* *Culture-negative cytokine-mediated fever occurs in up to 50% of cases but there is still a significant risk of fatal infection*

Written by	Dr MP Macheta, Consultant Haematologist
Date	July 2013
Review	July 2015