DOXORUBICIN infusion

INDICATION (ICD10) C41, C49
1. Palliative chemotherapy for sarcoma. PS 0, 1 or 2

REGIMEN
Day 1 DOXORUBICIN 60mg/m^2 in 100ml sodium chloride 0.9% IV infusion over 4* hours

May be increased to 75mg/m^2 in younger patients without comorbidity

*Reduce doxorubicin infusion duration to 1 hour for those receiving dexrazoxane (administered 30 minutes before doxorubicin).

CYCLE FREQUENCY AND NUMBER OF CYCLES
Every 21 days for 6 cycles

ANTI-EMETICS
High emetic risk day 1

CONCURRENT MEDICATION REQUIRED

Doxorubicin – dexrazoxane cardioprotection	Dexrazoxane (Blueteq registration required) for patients under the age of 25 years receiving a cumulative anthracycline dose equivalent to doxorubicin ≥300mg/m^2. See OUH 'Dexrazoxane (Cardioxane®) Guidelines for Preventing Cardiotoxicity with High-dose Anthracyclines in Paediatric Haematology and Oncology' guidelines for dose, number of doses and administration information.
GCSF	GCSF for 7 days starting at least 24 hours after chemotherapy

EXTRAVASATION AND TYPE OF LINE / FILTERS
Doxorubicin - vesicant

No filter required
Central or peripheral line

INVESTIGATIONS
Blood results required before SACT administration
FBC, U&E and LFTs every week
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Serum creatinine every cycle
ECHO at baseline and after cycles 2, 4, 5 and 6
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Doxorubicin	Cardiotoxicity – Monitor cardiac function to minimise the risk of anthracycline induced cardiac failure. Doxorubicin may be stopped in future cycles if signs of cardiotoxicity e.g. cardiac arrhythmias, pericardial effusion, tachycardia with fatigue.

DOSE MODIFICATIONS

Doxorubicin maximum lifetime dose
= 400mg/m^2 (in patients with cardiac dysfunction or exposed to mediastinal irradiation)
= 450-550mg/m^2 (with normal cardiac function)

Hepatic impairment

Doxorubicin

Bilirubin 20-50micromol/L	give 50% dose
Bilirubin 51-85micromol/L	give 25% dose
Bilirubin >85micromol/L or Child-Pugh C	not recommended

REFERENCES

1. Jensen et al 2002, Annals of Oncology 13:699-709
2. Lorigan P et al European Organisation for Research and Treatment of Cancer Soft Tissue and Bone Sarcoma Group Study. Phase III trial of two investigational schedules of ifosfamide compared with standard-dose doxorubicin in advanced or metastatic soft tissue sarcoma: a European Organisation for Research and Treatment of Cancer Soft Tissue and Bone Sarcoma Group Study. J Clin Oncol. 2007 Jul 20;25(21):3144-50