PENNSTATE HERSHEY
Cancer Institute

HyperCVAD

REVISED November 2012

J Clin Onc 1999; 17:2461-2470

Date written _____ To begin _____

Patient's: Height_____cm Weight_____kg BSA_____m^2
Allergies: ☐No ☐Yes: _____
Diagnosis _____Metastatic Site_____

Protocol:
☐Yes #_____
☐ No
Source of Drug:
☐Routine supply
☐Protocol supply
☐Other

1. Laboratory Studies: On admission, CBC with diff, CMP, uric acid
2. Consent Obtained ?
   ☐ yes ☐ Preprinted Consent ☐ See Dictated Note ☐ Note in Chart
   ☐ No Plan _____
3. **ACTIVATE ORDER SET: CHEMO HYPER CVAD COURSE 2 ADULT**
4. Premedications:

Hydration: 1/2NS with 100 mEq $NaHC0_3$/Liter. Give 1000 ml over one hour and then150 mls/hr until discharge
Check and record each void for urine pH.
Hourly I and O's
Once urine pH>7 and urine output >100 mls/hour for 4 hours, begin chemotherapy.
If these parameters are not met within 6 hours of beginning hydration, call coverage for modification of plan
AM weights on all patients, call care provider if weight increases by >1kg/day.

Antiemetics: Prochlorperazine 10 mg po q4h prn nausea/vomiting
Prochlorperazine 10 mg IV q4h prn nausea/vomiting if not tolerating po meds

Other: Prednisolone 1% eyedrops, 2 drops to each eye QID days 2-7
Allopurinol 300 mg po daily

Safety check: 1. Creatinine clearance >60? ____yes_____no (Many recommend not using high dose methotrexate if creatinine clearance is <60.)

2. Avoid drugs which decrease methotrexate clearance (Probenecid, penicillins, cephalosporins, ASA, NSAIDS)

3. Any fluid collections? Ascites? Pleural effusions? _____yes_____no (drain prior to therapy)

Call fellow or attending with admission lab for final clearance and order to proceed with chemotherapy

MD/Preparer's Signature_____

Attending Physician Signature_____

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5. Chemotherapy: Cycle #_____

Day 1

Ondansetron 8 mg IV prior to methotrexate and q 24 hours x 2 doses thereafter
Dexamethasone 20 mg IV prior to methotrexate and q 24 hours x 2 doses thereafter

Methotrexate 1000 mg/ m^2 =_____mg given as a 24 hour infusion
(total, methotrexate dose = 1000 mg/m^2)

Leucovoran Rescue (Folinic Acid)

Start leucovorin (folinic acid) 20 mg orally exactly 12 hours after the end of the methotrexate infusion, then give 20 mg orally every 6 hours. Give IV if patient is not tolerating oral medications

Days 2 and 3

Cytosine arabinoside 3000 mg/ m^2 =_____mg IV q 12 hours x 4 doses over 2 hours, begin day 2. (total dose=12,000mg/ m^2)

Day 2 CNS prophylaxis: ❑ YES ❑ NO

Methotrexate

❑ **6 mg (Ommaya)** ❑ **12 mg (spinal tap) to bedside.** Call Fellow when

Day 4 (as outpatient)

Growth Factors

❑ G-CSF 5 ug/kg=_____(round to nearest: 300 or 480 micrograms) daily subcutaneously.

❑ Pegfilgrastim 6 mg subcutaneously to be given_____
Date

Day 6

Begin

Ciprofloxacin 500mg po BID
Acyclovir 400mg po TID

Day 7 CNS prophylaxis: ❑ YES ❑ NO

Ara C 100mg for IT administration to bedside. Call fellow when available.

Laboratory studies

On admission/day of chemo: CBC with diff and CMP

Daily: BMP

Methotrexate level

Daily level automatically ordered with AM labs. If additional levels desired, enter order

Upon discharge:

See discharge instructions (attached)
Continue Ciprofloxacin, acyclovir and G-CSF
CBC with platelets every Monday, Wednesday and Friday AM, fax results to (717)531-5111

MD/Preparer's Signature_____

Attending Physician Signature_____

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Usual method	Worksheet	Alternative method
MTX level at end of infusion <20mmol/L and <1.00mmol/L at 24 hours from end of infusion and <0.1mmol/L at 48 hours from end of infusion	MTX level at 24 hours or earlier from end of Infusion_____ ___ MTX level at 48 hours or earlier from end of	If MTX level >0.20mmol/L at 24 hours from the end of the methotrexate infusion, check a methotrexate level **6** hours later, (requires and extra blood draw which must be ordered). Using that value, calculate the methotrexate half-life. If the methotrexate half-life is < 8
AND Normal baseline creatinine and no increase > 0.3mg/dl during course of therapy	Daily Creatinine levels Pre-Treatment: Day 0: Day 1: Day 2: Day 3:	AND Normal baseline creatinine with no increase > 0.3mg/dl during course of therapy
Then Discharge patient without leucovorin		Then Discharge patient without leucovorin
Arrange Neulasta for the next day		**Arrange Neulasta for the next day**
If there are any variations from these predicted values, leucovorin dose may have to be adjusted, and duration of therapy prolonged with outpatient testing.		If there are any variations from these predicted values, leucovorin dose may **have** to be adjusted, and duration of therapy prolonged with
If outpatient leucovorin needed: 1. Call RN coordinator X_____ to alert them to watch for methotrexate levels 2. Discharge the patient on: **Leucovorin lOmg orally every 6 hours*** Bicarbonate tablets 650mg, 2 tablets orally every 6 hours (can be taken with leucovorin) Drink 3L fluids/day Daily BUN/Creatinine (HMC)** Daily MTX level (HMC)** 3. Patient to call in if any doses missed, or if nauseated	Prescriptions for ❑ leucovorin* ❑ Bicarbonate tabs ❑ lab tests- methotrexate level and BUN/Creatinine Instructions for ❑ **Hydration** ❑ **Lab testing**** ❑ **Phone numbers Janet Hartzler Joanne Martin (531-5853)** * script should be filled at HMC outpatient pharmacy (Suite 1200, UPC 2) (M-F: 8:30-17:30; S-S: 9:00-14:00) since few other	**For outpatient methotrexate testing: Give patient prescription for methotrexate level and BUN/Creatinine with instructions about where to go for blood draw before noon each day (Suite 520 in UPC I for peripheral sticks). Labs must be done at HMC. Each day that a patient has a methotrexate level drawn, patient should then call/page Their nurse coordinator at 16:15 for results.
Patients must have stable, normal renal function and a methotrexate level = 0.2 gmol/L or less to be discharged on leucovorin. If the methotrexate level is < 0.1 gmoUL, the patient can be discharged without leucovorin		

PENNSTATE
Cancer Institute
at Penn State Milton S. Hershey Medical Center

Revised November 2012

Sodium Bicarbonate Order Clarification

Date written _____ To begin _____

Due to drug shortage: as per written sodium bicarbonate containing orders, modify the IV fluid as follows:
*note that high dose methotrexate orders require sodium bicarbonate/acetate IV for urinary alkalinization to prevent onset of renal impairment.

☐ **replace sodium bicarbonate (mEq) to sodium acetate (mEq) on a 1:1 basis (e.g. sodium bicarbonate 50 mEq = sodium acetate 50 mEq)**

☐ **change saline component to 0.9% sodium chloride**

☐ **change saline component of 0.45% sodium chloride**

Provider signature:_____

MR CHEMO ORDER