

### **Physical Exam:**

- Hemodynamics and Temperature
- Body weight and volume status (volume overload is common, given patients receive a lot of IVF)
- Examine all mucous membranes – chemo is notorious for causing mucositis. Be concerned about any skin lesions (e.g. a dark black eschar on the nose, this could be mucormycosis)
- Examine lower extremities, check for swelling and tenderness (Clots are common among hospitalized patients, risk is significantly higher among cancer patients)
- Neuro exam – Neurotoxic side effects of chemotherapy occur frequently and are often a reason to limit the dose of chemotherapy):
  - Vinca-alkaloids (VINCRISTINE), cisplatin and the taxanes are amongst the most important drugs inducing peripheral neurotoxicity. We use vincristin a lot when treating ALL or hodgkin lymphoma (Hyper CVAD part A and ABVD)
  - Methotrexate, cytarabine (cytosine arabinoside) and ifosfamide are primarily known for their central neurotoxic side effects. Central neurotoxicity ranges from acute toxicity such as aseptic meningitis, to delayed toxicities comprising cognitive deficits, hemiparesis, aphasia and progressive dementia. Check your patient's gait and cerebellar function when receiving hiDAC in consolidation for AML.

### **Labs:**

- CBC – Look at the differential and mention ANC; look at smear (Are there any premature cells, any blasts and how many?)
- Cr
  - Checking kidney function before giving chemo is important but also after chemo as toxicity and AKI (renal toxicity) are common (notorious with Gemcitabine and Cisplatin, also seen in Bevacizumab and TKI [Gleevec family]).
- Electrolytes, Urinalysis
  - ATN – Imatinib, pemetrexed, platinum
  - Fanconi – Cisplatin, TKI
  - Salt wasting – Cisplatin
  - Nephrogenic DI – Cisplatin, Ifosfamide, Alimta
  - SIADH – Vincristin, cyclophosphamide
  - AIN – Sorfenib, sunitib
  - MTX can cause Nephropathy (Make sure your patient urine pH >7.5 before starting MTX)
- LFT's
  - Important to know baseline liver function as this dictates dosing of certain chemo (Make sure to check Liver enzymes, bil, ALK phos)
  - Alkylating agent (cyclophosphamide, ifosfamide, melphalan, chlorambucil)

- The antimetabolites currently – Arabinoside (ara-C), 5-fluorouracil (5-FU), 6-mercaptopurine, azathioprine, 6-thioguanine, methotrexate, and gemcitabine.
- Check for Tumor Lysis once you have an acute leukemia patient or very high white count.
  - TLS panel = LDH, Cr, K, Phosphorus, Calcium, Uric acid (Hydration and Allopurinol are keys to prevent TLS, Rasburicase is also use to prevent high uric acid)
- Check For DIC (especially in acute leukemic patients)
  - DIC panel = PT, PTT, D-Dimer, Fibrinogen
- Urine pH – Very important when giving chemo; WE CANNOT GIVE MTX if urine pH is less than 7.5 otherwise the patient will have MTX toxicity.
- Check drugs level when needed
  - E.g. MTX levels (send out test, can be ordered in Cerner)

**Assessment & Plan:**

- DISEASE and Category (Mention if positive mutation, translocation – e.g. AML with recurrent genetic abnormalities, AML with t(8;21)(q22;q22); RUNX1-RUNX1T1; APL (t (15,17)PML-RARA; B ALL with recurrent genetic abnormalities t(9,22) BCR-ABL
- STAGE and Classification – e.g. WHO grade IV glioblastoma, FLT3 AML, WHO high risk
- Prior treatment
- Current Chemo regimen, Day
- IV fluids (total input)
- Side Effects of meds (ie. Constipation, diarrhea, what is controlling them)
- Pain controlled by \_\_\_\_\_
- Patient Status – In Consolidation/Remission
- Future follow up