Lymphoma

**DIAGNOSIS**

- Excisional lymph node biopsy
  - Hematopathology consult
  - Tissue handling required
  - Follow Hematopathology Guidelines for Lymphomas

**H&P exam**
- Bone marrow biopsy and aspirate
- CBC, Diff, Plt, Na, K, T Prot, Alb
- BUN creatinine, calcium, phosphorous, LDH, SGPT, alkaline phosphatase, total bilirubin, glucose, uric acid
- HIV

If anemic at presentation: Coombs and Haptoglobin
- CRX PA & Lateral CRX
- Echocardiogram

**CT Scans:**
- Chest if CXR abnormal
- Abdomen / pelvis
- Head and Neck (if head and neck presentation)
- Endoscopy, upper GI, barium enema (if gastrointestinal symptoms present or GI disease suspected)
- Skeletal films (if bone pain present-Bone Scan)

**PATHOLOGICAL DIAGNOSIS**

- Excisional lymph node biopsy
  - Hematopathology consult

**EORTC: Very Favorable Disease**
- Age < 40 and female lymphocite predominant/nodular clerosing and Stage I
- No "B" symptoms and normal Sed Rate and 1 nodal site

**EORTC: Favorable Disease**
- Those not in very favourable or unfavorable groups

**EORTC: Unfavorable Disease**
- Age >= 50 or Large mediastinal mass or "B" symptoms
- Sed Rate >= 30 or >=4 Nodal sites
- Age >= 50 or Large mediastinal

**Non-Hodgkin's Lymphoma**
- Special Cases:
  - Patients with > 2 unfavorable features
  - Radiation Therapy to Mantle and/or Para-Aortic/Splen and/or pelvic depending on site of presentation

**Hodgkin's Disease**
- Stages I-II
- Echocardiogram
- Chest if CXR abnormal
- Chemo options:
  - ABVD x6 (Preferred Course) or CVPP or MOPP (if age < 40, but not preferred)
  - Clinical Trial or ABVD x6

**HIV Positive**
- Evaluate for Clinical Trials
  - 2. ABVD x6 courses; followed by Radiation Therapy to Bulky Disease
  - 3. CVPP/MOPP

**HIV negative**
- B-Cell Lymphomas
- Refer to B-Cell Lymphoma Guidelines
- T-Cell Lymphomas
- Refer to T-Cell Lymphoma Guidelines

**Radiation Therapy**
- to Mantle and/or Para-Aortic/Splen and/or pelvis (depending on site of presentation)

**Special Cases**
- Patients with > 2 unfavorable features

**Muti-modality Chemo/Radiation Therapy:**
  1. Evaluate for Clinical trials
  2. ABVD x6 courses; followed by Radiation Therapy to Bulky Disease
  3. CVPP/MOPP

**Chemo therapy-Consolidate with Radiation therapy to any large mass**
- Chemo options:
  - ABVD x6 (Preferred Course) or CVPP or MOPP (if age < 40, but not preferred)

**Clinical Trial or ABVD x6**
- 1. Evaluate for Clinical Trials
  - 2. If CD4 >/=200, CHOP +/- Radiation Therapy
  - 3. If CD4<200, no curative standard therapies Consider palliation

**Refer to B-Cell Lymphoma Guidelines**
- Refer to T-Cell Lymphoma Guidelines
Pathological Diagnosis

- Any sub-category of primary brain presentation
- Mucosal associated lymphoid tissue (MALT) low grade
- Mantle Cell Lymphoma (L26+, CD5+, CD10-, CD23-, & light chain expression)
- Lymphoblastic Lymphoma (TdT+)
- Burkitt’s Lymphoma or diffuse small non-cleaved cell lymphoma
- Large Cell Lymphoma *
  - (Diffuse, follicular non-cleaved, T-Cell rich, immunoblastic or anaplastic)
- Follicular Center Grades 1 (FSCCL) and 2 (FMXL) and small Lymphocytic lymphomas other than Malt

Initial Treatment

- Evaluate for Clinical Trials
  - No standard therapies available
- Refer to Acute Lymphocytic Leukemia Guidelines
- Chemo: MCOP/HOAPBLEA/IMVP16
- Refer to Acute Lymphocytic Leukemia Guidelines
- Multi-Modality Chemo-radiaion therapy:
  - CHOP x6 for follicular or bulky disease with XRT to involved field
- Chemotherapy: CHOP x6, +/- XRT
- Strong recommendation for Clinical Trials for poor risk score
- 1. Clinical Trials or
  2. Radiation (preferred: central lymphatic) or
  3. Combined Modality Therapy (Chemo/radiation Therapy)

*Tumor Score Definition:
- 1 Point per Factor
- Tumor Score Factors:
  - LDH >/=10% above normal
  - B Symptoms pos
  - Bulky Disease >/=7cm mass
  - Ann Arbor Stage III/IV

HIV negative B-Cell Lymphomas

Legends:
- *Tumor Score Definition: 1 Point per Factor
- Tumor Score Factors:
  - LDH >/=10% above normal
  - B Symptoms pos
  - Bulky Disease >/=7cm mass
  - Ann Arbor Stage III/IV
DIAGNOSIS

Salvage Wok-Up
- Re-biopsy node to document recurrence; workup as per initial evaluation
- Evaluate for transformation to higher grade lymphoma

Lymphoma

SALVAGE TREATMENTS

Recurrence after Radiation Therapy alone

OUTSIDE XRT FIELD:
- Watch & Wait or XRT
- Chemotherapy
  - a. Single Agent
  - b. Combination Chemo +/- Radiation Therapy

RECURRANCE IN XRT FIELD:
- Chemotherapy
  - a. Single Agent
  - b. Combination Chemo +/- Radiation Therapy

Follicular center, Grade 1 (FSCCL), (FMXL) or Small Lymphocytic Lymphoma (No Transformation)

Follicular center, Grade 1 (FSCCL), (FMXL) (Positive transformation to higher grade lymphoma)

Recurrence after prior chemotherapy

Chemotherapy: CHOP or Consider Radiation Therapy

If not eligible for Cinical Trials, or ECOG status >3
- Supportive Care

If no response to chemotherapy or radiation therapy, evaluate for clinical trials
**TREATMENT**

1. Evaluate for Clinical Trials of
2. PUVA or
3. Topical chemotherapy or
4. Radiation Therapy

**DIAGNOSIS**

- Mycosis fungoides (early stages)
- Mycosis fungoides (late stages)/Sezary Syndrome
- Peripheral T-Cell or High grade T-Cell Lymphoma
- Anaplastic Large cell/Ki 1 (including null)
- Lymphoblastic

**T-Cell Lymphoma (HIV Negative)**

**Anaplastic Large cell/Ki 1 (including null)**

**Mycosis fungoides**

Refer to Acute Lymphocytic Lymphoma Guidelines