K30 Case Presentation

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Case Presentation

• 58M with several months of fatigue and 40 lbs weight loss
  – Early satiety
  – No fevers or chills
  – Upper and lower endoscopy unrevealing
  – PMH unremarkable
  – No medications
  – No recent travel or sick contacts
Case Presentation

• Physical Examination
  – Low grade fever (38.0 C)
  – Chronically ill appearing
  – 1-2 cm cervical and L supraclavicular adenopathy
  – Splenomegaly (3cm below costal margin)
Case Presentation

• Laboratory data:
  – WBC 4.3 (50% polys, 13% lymphs, 35% monos)
  – Hgb 6.0, MCV 70, platelets 177
  – Albumin 2.0, ALT 87, AST 117, TB 0.7

• Imaging (CT chest/abd/pelvis)
  – Supraclavicular, peri-esophageal, portocaval adenopathy, and splenomegaly
Case Presentation

- **Key features:**
  - Lymphadenopathy
  - Splenomegaly
  - Anemia
  - Cachexia
  - Mild LFT abnormality

- **Differential diagnosis:**
  - Lymphoma
  - Other malignancy
  - Infection (esp tuberculosis or fungal)
  - Sarcoidosis
Diagnosis

• Diagnostic procedures:
  – Excisional lymph node biopsy
  – Bone marrow biopsy

• Diagnosis:
  – Classical Hodgkin’s Lymphoma, involving lymph node and bone marrow
Hodgkin’s Disease

• Sir Thomas Hodgkin (1798 – 1866)
• Described in 1832, “On Some Morbid Appearances of the Absorbent Glands and Spleen.”
Hodgkin’s Disease

- Characterized by giant, binucleate Reed-Sternberg cells
- Other lymphocytes are not in themselves malignant, but are stimulated to grow by the RS cells
Hodgkin’s Disease - Epidemiology

Incidence of Hodgkin's Disease in US, 2000-2004

Source: http://seer.cancer.gov/faststats
Staging and Treatment

• Stage I and II: chemotherapy and radiation
• Stage III and IV: treated with chemotherapy
Risk-Adapted Therapy

• Don’t want to overtreat low risk patients, since this will increase the number of treatment-related side effects

• Don’t want to undertreat high risk patients, since relapsed disease develops resistance to therapy and is much harder to cure
Hodgkin’s: Second Malignancies

• 40 excess cancers per 10,000 patients/year
  – Lung and breast – associated with radiation therapy
  – Acute leukemia – associated with alkylating chemoRx
  – Risk of death from second cancer: 14% over 20 years

• Risk for solid tumors still elevated **20-30 years** after treatment for Hodgkin’s

• Evolution of treatment
  – Decreased use of radiation
  – Decreased use of alkylating agents
Hodgkin’s Disease Risk Factors

- Albumin <4.0 g/dL
- Hemoglobin <10.5 g/dL
- Male sex
- Age >45
- Stage IV disease
- WBC > 15K
- Lymphopenia (<600/mm3 or <8% total)

Hodgkin’s Disease Risk Factors

- Albumin < 4.0 g/dL
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Risk Stratification

![Graph showing survival rates with different scores.](image)

High risk patients: ABVD vs escalated BEACOPP

- **ABVD** = standard combination chemotherapy for advanced HD
- **Escalated BEACOPP** = more intensive regimen
  - Better disease-free and overall survival compared to standard regimens*
  - More toxic

* V Diehl, NEJM 2003
Case Presentation

• Given high risk features, patient treated with escalated BEACOPP
• During first cycle, presented with neutropenia and septic shock → ICU
• Discharged to home after 10 days in hospital
• Chemotherapy modified to ABVD
Case Presentation

- Patient completed 6 cycles of chemotherapy
- PET-CT after 2 cycles negative (good prognostic sign)
- Developed bleomycin pulmonary toxicity after completing therapy
- Most recent PET-CT 15 months after diagnosis shows no evidence of disease
Conclusions

• Future of oncology is individualizing treatment plan for each patient
  – Specific treatments for disease subtypes
  – Variations in treatment intensity based on risk

• More aggressive therapy sometimes needed, but it comes at a cost
  – Need for rigorous randomized trials to determine treatment with best risk:benefit ratio