Capsule summary of NCCN Guidelines for Hodgkin Lymphoma

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Diagnosis:
1. Excisional biopsy (recommended) or core biopsy.
2. Immunohistochemistry: Classical HL (CD15+, CD30+, PAX-5+, CD3-, CD20+, CD45-, CD79a-), Nodular lymphocyte-predominant (CD20+, CD45+, CD79a+, BCL6+, PAX-5+, CD15-, CD30-, CD3-).

Work up:
1. CBC with differential, ESR.
2. Comprehensive metabolic panel including LDH and Liver functions.
3. CT, PET-CT, MRI, PET-MRI.
5. Pulmonary function tests if ABVD or BEACOPP are being used.
6. EF evaluation if doxorubicin-based chemotherapy is indicated.
7. Bone marrow biopsy if there is cytopenias with –ve PET.
8. Pneumococcal, Meningococcal and H-Flu vaccines if splenic radiotherapy is contemplated.
9. HIV, HBV and HCV tests (encouraged).

Staging:
I. Involvement of a single lymph node region (I) or a localized involvement of a single extra lymphocytic organ or site (IE).
II. Involvement of 2 or more lymph node region on the same side of diaphragm (II) or localized involvement of a single associated extralymphocytic organ or site and its regional lymph node with or without involvement of other regional lymph nodes on the same side of diaphragm (IIIE).
III. Involvement of lymph node region on both sides of the diaphragm (III) which may be accompanied by localized involvement of an associated extra lymphocytic organ or site (IIIIE) or splenic involvement (IIIIs) or both (IIIIES).
IV. Disseminated (multifocal) involvement of one or more extra lymphocytic organ with or without associated lymph node involvement or isolated extra lymphocytic organ involvement with distant (non-regional) lymph node involvement.
A For no systemic symptoms present.
B For presence of systemic symptoms (B symptoms).

Treatment of Classical HL:

Stage IA, IIA: Favorable (no bulky disease, < 3 sites of disease, ESR <50, no E-lesions):

1. ABVD × 3 cycles -----> restage with PET/CT----->
   - Deauville 1-2 -----> Follow up or give another ABVD × 1cycle (total 4).
   - Deauville 3-4 -----> ABVD × 1cycle (total 4) + Involved site irradiation therapy (ISRT) 30 GY.
   - Deauville 5------> re-biopsy ----->if –ve treat as Deauville 3-4, if +ve treat as refractory disease.

2. ABVD × 2 cycles -----> restage with PET/CT----->
   - Deauville 1-2 -----> ABVD × 1cycle (total 3) + ISRT 30 GY
   - Deauville 3-4 -----> Escalated BEACOPP × 2 cycles + ISRT 30 GY or ABVD × 2 cycles (total 4) + ISRT 30 GY.
   - Deauville 5------> re-biopsy ----->if –ve treat as Deauville 3-4, if +ve treat as refractory disease.

3. Stanford V × 8 weeks -----> restage with PET/CT----->
   - Deauville 1-4 -----> ISRT 30 GY
   - Deauville 5------> re-biopsy ----->if –ve ISRT 30 GY, if +ve treat as refractory disease.

Stage I, II: Unfavorable ( > 3 sites of disease, ESR ≥ 50, +ve B-Symptoms)+ non bulky disease:

1. ABVD × 2 cycles -----> restage with PET/CT----->
   - Deauville 1-2 -----> ABVD × 2 cycle (total 4) + ISRT or AVD × 4 cycle (total 6) ± ISRT.
   - Deauville 3-4 -----> Escalated BEACOPP × 2 cycles or ABVD × 2 cycles (total 4) -----> Consired PET/CT -----> ISRT.
   - Deauville 5------> re-biopsy ----->if –ve AVD × 4 cycle (total 6) + ISRT, if +ve treat as refractory disease.

2. Stanford V × 12 weeks -----> restage with PET/CT----->
   - Deauville 1-4 -----> ISRT to initial sites >5cm (30-36 GY) begins within 2-3 weeks
   - Deauville 5------> re-biopsy ----->if –ve ISRT as Deauville 1-4, if +ve treat as refractory disease.

3. Escalated BEACOPP × 2 cycles + ABVD × 2 cycles + ISRT ( for <60 years old) -----> restage with PET/CT----->
   - Deauville 1-4 -----> ISRT to initial sites >5cm (30-36 GY) begins within 2-3 weeks
   - Deauville 5------> re-biopsy ----->if –ve ISRT as Deauville 1-4, if +ve treat as refractory disease.

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Stage I, II: Unfavorable (>3 sites of disease, ESR ≥ 50, +ve B-Symptoms)+ bulky mediastinal disease or >10cm adenopathy:
1. ABVD × 2 cycles ----> restage with PET/CT---->
   - Deauville 1-3 ----> ABVD × 2 cycle (total 4) + ISRT or AVD × 4 cycle (total 6) ± ISRT.
   - Deauville 4 ----> Escalated BEACOPP × 2 cycles + ISRT or ABVD × 2 cycles (total 4) + ISRT.
   - Deauville 5----> re-biopsy ----->if --ve treat as Deauville 4, if +ve treat as refractory disease.
2. Stanford V × 12 weeks ----> treat as Stage I, II: Unfavorable non bulky.
3. Escalated BEACOPP × 2 cycles + ABVD × 2 cycles + ISRT (for <60 years old) -----> treat as Stage I, II: Unfavorable non bulky.

Stage III, IV:
1. ABVD × 2 cycles ----> restage with PET/CT---->
   - Deauville 1-3 ----> ABVD × 4 cycles ----> Follow up or ISRT to initially bulky or PET +ve sites.
   - Deauville 4-5 ----->
     - Escalated BEACOPP × 4 cycles or ----> restage with PET/CT----->
       - Deauville 1-3 ----> Follow up or ISRT to initially bulky or PET +ve sites.
       - Deauville 4-5 ----->re-biopsy ----->if --ve ISRT to initially bulky or PET +ve sites, if +ve treat as refractory disease.
     - ABVD × 2 cycles (total 4)----> restage with PET/CT----->
       - Deauville 1-3 ----> ABVD × 2 cycle (total 6) ± ISRT to initially bulky or PET +ve sites.
       - Deauville 4-5 ----->re-biopsy ----->if --ve ABVD × 2 cycle (total 6) ± ISRT to initially bulky or PET +ve sites, if +ve treat as refractory disease.
2. Stanford V × 12 weeks (in selected patients with IPS <3) ----> treat as Stage I, II: Unfavorable non bulky.

Treatment of Classical HL Refractory disease:
Biopsy proven refractory disease -----> Second line chemotherapy (ABVD, CHOP, CVP) + Rituximab -----> re-stage with PET/CT----->
• Deauville 1-3 -------> High-dose therapy + autologous stem cell rescue (HDT/ASCR ± RT) or Follow up ± RT (if HDT/ASCR contraindicated).
• Deauville 4-------> HDT/ASCR ± RT or RT or Additional chemotherapy ± RT
• Deauville 5 -------> RT or Additional chemotherapy ± RT

Treatment of Nodular Lymphocyte-Predominant HL:

- Initial treatment according to the stage:
  - CS IA, IIA (non-bulky): Follow up or ISRT.
  - CS IB, IIB or CS IA, IIA (bulky): chemotherapy (ABVD, CHOP, CVP) + Rituximab+ ISRT.
  - CS IIIA, IVA: chemotherapy (ABVD, CHOP, CVP) + Rituximab ± ISRT or Rituximab or Local RT (Palliation of locally symptomatic disease).
  - CS IIIB, IVB: chemotherapy (ABVD, CHOP, CVP) + Rituximab ± ISRT.

- For all stages -------> Re-evaluation with PET-CT:
  - Response: Follow up or ISRT (if no prior RT).
  - Stable or progressive: Rebiopsy-------> if –ve Follow up, if +ve treat as refractory disease.

Treatment of Nodular Lymphocyte-Predominant Refractory HL:

Biopsy proven refractory disease ------->

- NLPHL: Follow up or Rituximab ± chemotherapy ± ISRT -------> Re-evaluation with PET-CT------->If clinical response follow up, if progressive disease treat as refractory classical HL.