Clinical practice guidelines have been developed after multi-disciplinary consensus based on best available literature. As the name suggests, these are to be used as a guide only. These guidelines do not replace physician judgment which is based on multiple factors including, but not limited to, the clinical and social scenario, comorbidities, performance status, age, available resources and funding considerations. The Saskatchewan Cancer Agency disclaims all liability for the use of guidelines except as expressly permitted by the Agency. No portion of these guidelines may be copied, displayed for redistribution to third parties for commercial purposes or any non-permitted use without the prior written permission from the Agency.

Benefits and risk of the proposed should be discussed with patient.

Participating in clinical trials is encouraged when available. Involvement of a multidisciplinary team is strongly recommended.

Diagnosis and Work-up:

- Diagnosis by core or excisional (preferred) biopsy.
- History and physical exam
- CBC, metabolic profile, albumin, LDH, ESR
- Bone marrow biopsy (in stage IB, IIB, III and IV)
- Pregnancy test in childbearing woman
- Consider screening for Hepatitis B, Hepatitis C and HIV
- TSH if radiation is planned
- Chest X-ray PA and lateral (in selected cases)
- CT chest/abdomen/pelvis
- CT neck (as clinically indicated)
- PET/CT (in selected cases)
- Cardiac wall motion study (MUGA) or Echo-2D
- Pulmonary function test

Staging

Stage I - Involvement of a single lymph node region

Stage II - Involvement of two or more lymph node regions or lymph node structures on the same side of the diaphragm.

Stage III - Involvement of lymph node regions or lymphoid structures on both sides of the diaphragm.

Stage IV - Diffuse or disseminated involvement of one or more extra nodal organs or tissue beyond that designated E, with or without associated lymph node.
All cases are sub classified into:

(A) Absence

Or

(B) Fever or night sweats or weight loss > 10 percent during the six months

Other Designations

"E" - Extra nodal contiguous extension.

"X" - Bulky disease (mediastinal mass with a maximum width that is equal to or greater than one-third of the internal transverse diameter of the thorax at the level of T5/6 interspace or > 10 cm maximum dimension of a nodal mass)

International Prognostic Score for Hodgkin Lymphoma (stage III and IV)

- Serum albumin <40 g/L
- Hemoglobin <105 g/L
- Male gender
- Stage IV disease
- Age >45 years
- White blood cell count ≥15,000/mm3
- Lymphocyte count <600/mm3 or <8 % of white cell count

Score ranges from 0 to 7.
Median survival at the end of 5 years ranges from 89% (0 score) to 56% (5 or more score).

Treatment of Classical Hodgkin’s Lymphoma: Stage IA/B, IIA and selected IIB

Assess prognostic features as per German Hodgkin’s Study Group (GHSG)

- Three or more sites of disease
- Extra nodal extension
- Bulky disease
- ESR more than 50 mm/hr
  (more than 30 if B symptoms present)

Presence of any one adverse prognostic feature is considered as unfavorable prognosis.

Favorable prognosis

- Administer two cycles of Doxorubicin, Bleomycin, Vinblastine, Dacarbazine (ABVD) followed by 20 Gy involved field radiation therapy.

Unfavorable prognosis

- Administer four cycles of Doxorubicin, Bleomycin, Vinblastine, Dacarbazine (ABVD) followed by 30 Gy involved field radiation therapy.
- In bulky disease consider 30 to 36 Gy involved field radiation therapy.
Treatment of Classical Hodgkin’s Lymphoma: Stage IIB (extra nodal extension and bulky disease), IIIA/B and IVA/B

- Administer six to eight cycles of Doxorubicin, Bleomycin, Vinblastine, Dacarbazine (ABVD)
- In bulky disease consider involved field radiation therapy (30 to 36 Gy)

Treatment of Lymphocyte Predominant Hodgkin’s Lymphoma

- In stage IA disease: 30 to 36 Gy involved field radiation therapy alone
- Treatment similar to classical Hodgkin’s lymphoma
  
  Note: Can consider Rituximab with or without Doxorubicin, Bleomycin, Vinblastine, Dacarbazine (ABVD) or Cyclophosphamide, Doxorubicin, Vincristine, Prednisone (CHOP) or Cylophosphamide, Vincristine, Prendnisone (CVP) or observation in selected cases

Evaluate for treatment response

Interim

- None in non-bulky stage IA/B, IIA and selected IIB with favorable or unfavorable features
- After two to four cycles of chemotherapy, access with CT for response in IIB (extra nodal extension and bulky disease) III and IV disease

After completion of treatment

- PET/CT (preferred) after 4 weeks of chemotherapy or 9 to 12 weeks of radiation therapy.
- Bone marrow biopsy if initially positive

Residual or Refractory or Recurrent Disease and Stem Cell Transplant guidelines in Relapsed Hodgkin’s Lymphoma

- Salvage radiation therapy if relapse is limited and can be dealt with by radiation therapy
- If more than limited or early relapse:
  - Salvage chemotherapy if patient eligible to undergo autologous stem cell transplant (ASCT).
  - Gemcitabine, Dexamethasone, Cisplatin (GDP) or similar salvage protocol, 2 to 4 cycles will be used
  - Reassessment by CT-scan post 2nd cycle
- Proceed to ASCT if Complete Response (CR) or Partial Response (PR)
  - BEAM conditioning
- If not in CR/PR : 1-2 more cycles then ASCT regardless of response
PET-CT evaluation 6-8 weeks post ASCT

Consider radiation therapy for single PET positive lesion post ASCT

Consider reduced intensity allogenic stem cell transplant (RIC-AlloSCT) if patient < 50 years old and

- High risk, defined as:
  - PET positivity post ASCT and/or
  - Two risk factors of:
    - Relapse in less than 12 months from initial CT (should be one of them)
    - Stage III/IV at relapse
    - Relapse in previously irradiated site

Brentuximab or inclusion in clinical trial will be considered for relapse post allogenic stem cell transplant or after autologous stem cell transplant if the patient is not eligible for another auto stem cell transplant or allogenic transplant

Second ASCT may be considered in relapsed patients who were in remission more than five years post the first ASCT

Patients with relapse not eligible for transplant can be treated with palliative salvage chemotherapy regimens

Follow-up Guidelines

- History and physical exam every 3 months for first 2 years, every 6 months for the next 3 years and then annually

- Annual influenza vaccine

- Labs: CBC, Metabolic panel, LDH, annual TSH if RT administered to neck

- Surveillance imaging when clinically indicated

- Assess for late effects (i.e. 5 years after treatment) annually: cardiovascular disease, screening for secondary cancers if RT was administered (chest X-ray for lung, mammogram/MRI breast)
Key References:


22. Schmitz N, Pfistner B, Sextro M, Sieber M et al. Aggressive conventional chemotherapy compared with high-dose chemotherapy with autologous haemopoietic stem-cell


GHSG: German Hodgkin’s Study Group

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