Magellan Healthcare	
Clinical Guideline: NON-HODGKIN'S LYMPHOMA	Original Date: June 2013
Radiation Oncology	Last Review Date: July 2017
Guideline Number: NIA_CG_133	Last Revised Date: July 2017
Responsible Department: Clinical Operations	Implementation Date : January 2018

INTRODUCTION:

The incidence of non-Hodgkin's lymphomas has increased substantially over the past few decades due to age-related disease. The majority of non-Hodgkins lymphoma originates in B-lymphocytes (80-85%) with T-lymphocytes comprising 15-20%. Natural killer cell lymphomas are very rare. The classification of non-Hodgkins lymphoma is based on the cell of origin (large B, large T, or large NK), precursor or mature lymphocytes, as well as genetic, immunophenotype, and clinical features. Radiation therapy is typically delivered to the involved field either alone or in consolidation following chemotherapy. CT-based simulation and 3-dimensional planning is typically advised.

The use of intensity modulated radiation therapy as well as stereotactic body radiotherapy would be unusual. If requested, this would require peer to peer review to determine medical necessity. For nodal sites, radiation therapy alone or consolidation following chemotherapy should treat the involved field in most cases. Regional/ extended fields are typically not recommended.

Initial Clinical Reviewers (ICRs) and Physician Clinical Reviewers (PCRs) must be able to apply criteria based on individual needs and based on an assessment of the local delivery system.

INDICATIONS FOR RADIATION THERAPY AND TREATMENT OPTIONS:

Three-dimensional conformal radiation therapy (3D-CRT) or two-dimensional (2D) radiation therapy (2D) is the appropriate technique for treatment of Non –Hodgkin's Lymphomas.

Radiation dose is typically 24-36 Gy in standard fractionation. The following include radiation dose guidelines for the following lymphomas:

- Follicular lymphoma (24-30 Gy, or 36 Gy if bulky) up to 20 fractions
- Mantle cell lymphoma (30-36 Gy) up to 20 fractions
- MALT lymphoma – Marginal Zone (24-30 Gy) up to 17 fractions
- Diffuse large B cell lymphoma (30-36 Gy for CR, 40-50 Gy for PR following chemotherapy) up to 28 fractions
- Primary cutaneous anaplastic large cell lymphoma: 30-36 Gy up to 20 fractions
- NK/T Lymphoma
    - primary treatment: 50-55 Gy up to 31 fractions
    - combined modality: 45-50.4 Gy up to 28 fractions

- Localized chronic lymphocytic leukemia (CLL) and Small Lymphocytic Lymphoma (SLL): 24-30 Gy up to 17 fractions
- Palliative dose (up to 10 fractions) for symptom control

Unless otherwise indicated, standard radiation fractionation consists of 1.8 Gy to 2.0 Gy per day.

TREATMENT OPTIONS REQUIRING PHYSICIAN REVIEW:

Intensity modulated radiation therapy (IMRT)

IMRT is not indicated as a standard treatment option and should not be used routinely for the delivery of radiation therapy for non Hodgkin's lymphoma. IMRT is strictly defined by the utilization of inverse planning modulation techniques. IMRT may be appropriate for limited circumstances in which radiation therapy is indicated and 3D conformal radiation therapy (3D-CRT) techniques cannot adequately deliver the radiation prescription without exceeding normal tissue radiation tolerance, the delivery is anticipated to contribute to potential late toxicity or tumor volume dose heterogeneity is such that unacceptable hot or cold spots are created.

Clinical rationale and documentation for performing IMRT rather than 2D or 3D-CRT treatment planning and delivery will need to:

- Demonstrate how 3D-CRT isodose planning cannot produce a satisfactory treatment plan (as stated above) via the use of patient specific dose volume histograms and isodose plans.

- Provide tissue constraints for both the target and affected critical structures.

Stereotactic Body Radiation Therapy

Stereotactic Body Radiation Therapy (SBRT) is not currently an approved treatment option for the treatment of Non Hodgkin's Lymphoma. Recent studies comparing SBRT conventional radiation therapy are limited.

Proton Beam Radiation Therapy

Proton beam is not an approved treatment option for non Hodgkin's Lymphoma. Proton beam has not been proven superior treatment to conventional radiation therapy.

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