

Hodgkin's Disease Radiotherapy Decision Tree MALTHUS : Updated March 2013

Hodgkin Lymphoma	Fit for aggressive chemotherapy (95%)	Stage I + Stage II see below	See below
		Stages III + IV	See below
	Not fit for aggressive chemotherapy (5%)	Individualised chemotherapy	RT to sites of bulk or residual masses 30 Gy/15# [1] 20% cases

Hodgkin Lymphoma	Stage I and II (50%)	No high risk features (20%)	AVBD X 2	Radiotherapy 20 Gy/10# [2]		
		High risk features (80%)	No B symptoms No mediastinal bulk (80%)	Standard therapy	AVBD X 4	Radiotherapy 30 Gy/15# [2]
			'B' symptoms or Mediastinal bulk (20%)	'PET' directed Therapy is being studied in a number of trials. There is as yet no good evidence to support this approach as there is an increased risk of relapse if radiotherapy is omitted [3,4]		
	Stage III + IV and Stage I + II with B symptoms or mediastinal	Escalated BEACOPP 6-8 cycles (50%)	PET negative (80%)	No role for radiotherapy if PET negative [5,6,7]		
			PET positive (20%)	If PET positive post treatment options include RT or biopsy and further intensive therapy		
		AVBD x 6-8 (50%)	PET negative after 2 cycles (80%)	No residual mass: (70%) [8]	No role for radiotherapy	
				Persistent mass: (30%) [8]	RT 30Gy in 15 fractions [8] [Note RT is NOT routinely given to this group in current RATHL protocol]	

Hodgkin's Disease Radiotherapy Decision Tree MALTHUS : Updated March 2013

	bulk (50%)		PET positive after 2 cycles (20%)	Intensify chemotherapy After completion of chemotherapy there may be a limited role for RT in certain patients.
--	---------------	--	---	---

Clinical estimates are in Red

1. A.M. Moody, M.V. Williams. Radiation dose in Hodgkin's disease: Are we overtreating? Review Article. Clinical Oncology, Volume 9, Issue 3, 1997, Pages 155-157
2. Engert A, Plütschow A, Eich HT, Lohri A, Dörken B, Borchmann P, Berger B, Greil R, Willborn KC, Wilhelm M, Debus J, Eble MJ, Sökler M, Ho A, Rank A, Ganser A, Trümper L, Bokemeyer C, Kirchner H, Schubert J, Král Z, Fuchs M, Müller-Hermelink HK, Müller RP, Diehl V. Reduced treatment intensity in patients with early-stage Hodgkin's lymphoma. N Engl J Med. 2010 Aug 12;363(7):640-52.
3. Macdonald DA, Ding K, Gospodarowicz MK, Wells WA, Pearcey RG, Connors JM, Winter JN, Horning SJ, Djurfeldt MS, Shepherd LE, Meyer RM. Patterns of disease progression and outcomes in a randomized trial testing ABVD alone for patients with limited-stage Hodgkin lymphoma. Ann Oncol. 2007 Oct;18(10):1680-4. Epub 2007 Sep 10.
4. EORTC trial HD10 - arm omitting RT currently suspended. No formal report but presumably because of worse outcomes.
<http://www.cancer.gov/clinicaltrials/search/view?cdrid=531125&version=healthprofessional>
5. Eich HT, Diehl V, Görgen H, Pabst T, Markova J, Debus J, Ho A, Dörken B, Rank A, Grosu AL, Wiegel T, Karstens JH, Greil R, Willich N, Schmidberger H, Döhner H, Borchmann P, Müller-Hermelink HK, Müller RP, Engert A. Intensified chemotherapy and dose-reduced involved-field radiotherapy in patients with early unfavorable Hodgkin's lymphoma: final analysis of the German Hodgkin Study Group HD11 trial. J Clin Oncol. 2010 Sep 20;28(27):4199-206. Epub 2010 Aug 16.
6. Engert A, Diehl V, Franklin J, Lohri A, Dörken B, Ludwig WD, Koch P, Hänel M, Pfreundschuh M, Wilhelm M, Trümper L, Aulitzky WE, Bentz M, Rummel M, Sezer O, Müller-Hermelink HK, Hasenclever D, Löffler M. Escalated-dose BEACOPP in the treatment of patients with advanced-stage Hodgkin's lymphoma: 10 years of follow-up of the GHSG HD9 study. J Clin Oncol. 2009 Sep 20;27(27):4548-54. Epub 2009 Aug 24.

Hodgkin's Disease Radiotherapy Decision Tree MALTHUS : Updated March 2013

7. Eich HT, Kobe C, Markova J et al. Assessment of residual bulky tumor using FDG-PET in patients with advanced-Stage Hodgkin lymphoma after completion of chemotherapy: final report of the GHSG HD15 Trial. Blood (ASH annual meeting abstracts) 2010 116: Abstract 764.
8. Aleman BM, Raemaekers JM, Tomišić R, Baaijens MH, Bortolus R, Lybeert ML, van der Maazen RW, Girinsky T, Demeestere G, Lugtenburg P, Lievens Y, de Jong D, Pinna A, Henry-Amar M; European Organization for Research and Treatment of Cancer (EORTC) Lymphoma Group. Involved-field radiotherapy for patients in partial remission after chemotherapy for advanced Hodgkin's lymphoma. Int J Radiat Oncol Biol Phys. 2007 Jan 67:19-30.