

Infradiaphragmatic Hodgkin Lymphoma: long term outcome improved by chemotherapy-radiotherapy VS chemotherapy alone

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OBJECTIVES

Infradiaphragmatic Hodgkin Lymphoma (IHD) accounts for **5-10%** of adult cases of **stage I-II classical Hodgkin Lymphoma** (Mauch, Hematol Oncol. 1983; Vilamor, Eur J Haematol, 1991). Because of small number of patients in the previous published series, there is no consensual standard treatment and prognostic factors for pts with an IHD. The strategy of treatment has been improved and standardized along the last decades in most clinical subsets of HL, while it remains heterogeneous in IHD these pts being often excluded from clinical trial.

Thus, we retrospectively collected demographic, clinical and biological data in a series of pts coming from **8 french institutions** and analysed the prognosis impact of the therapy used.

METHODS

The clinical, biological data at baseline, the details of treatment and outcome of patients with a first diagnosis of stage I-II of IHD were retrospectively collected in 8 department of hematology. Patients with a positive HIV serology and those treated with radiotherapy alone were excluded. For all patients, clinical, biological and therapeutic data were collected.

RESULTS

From 1975 to 2012, 134 pts with a median age of 49 years (20-80) were included. Baseline staging was mainly based on a whole body CT scan, and 27 pts had a stage I (20%) and 107 pts a stage II (80%) disease. Most pts received ABVD (99 pts, 74%) or ABVD like (24 pts, 18%) chemotherapy regimen with a median number of 4 courses (1-8). Radiotherapy was performed in 78 pts (58%).

With a median follow-up of 64 months (2-312), 36 progression or relapse occurred (27%) and 22 pts died (16%), 7 from HL, 4 from second malignancies, 4 from infectious event, 1 from chemotherapy, 4 from cardiac or vascular events and 2 from unknown causes.

In multivariate analysis, **only radiotherapy and Hb<10.5g/dL** remained independent factors to predict PFS (RR = 0.26 (95% CI 10.13 – 0.54), p = 0.0003; RR=2.49 (95% CI 1.2 – 5.18) p=0.0147 respectively (Cox model: p <0.0001).

Table 1: Patients' characteristics

		ALL n=134 (%)	STAGE I n=27 (20%)	STAGE II n=107 (80%)	RADIOTHERAPY FREE n=56 (42%)	CHEMO-RADIOTHERAPY n=78 (58%)		
Sex ratio	ratio M/F	2.62	2.85	2.6	1.95	3.3		
Age (20-80)	average	49,1	47,9	49,5	50,8	47,96		
	median	49	47	49	49	48		
PS	PS 0	61%	72%	58%	66%	58%		
	PS 1-2	34%	28%	36%	27%	37%		
	PS 3-4	5%	0%	6%	4%	5%		
Stade Ann arbor	stage I	20%			9%	28%		
	stage II	80%			96%	72%		
Symptômes B		35%	19%	39%	34%	36%		
PET TDM	Before treatment	52%	63%	50%	66%	53%		
Bulky mass		13%	4%	15%	11%	14%		
Histological subtype	Nodular sclerosis	63%	74%	61%	64%	63%		
	Mixed cellularity	22%	11%	24%	27%	18%		
	Rich lymphocyte	8%	15%	6%	5%	10%		
	Depleted lymphocyte	<1%	0%	1%	0	1%		
	Unclassifiable	5%	0%	7%	4%	8%		
Biological data	Hb (g/dL)		Hb<10.5	14%	4%	17%	16%	13%
	Lymphocytes		<0.6 G/L	5%	0%	7%	2%	4%
	Ratio L/M <1		<8%	3%	0%	4%	5%	5%
	WBC		WBC>15G/L	10%	0%	8%	5%	8%
Localisation of disease	central	67%	11%	81%	86%	54%		
	central adenopathy	49%	7%	61%	61%	42%		
	mesenteric	16%	0%	21%	29%	8%		
	iliac	38%	4%	51%	48%	37%		
	peripheral adenopathy	29%	89%	17%	13%	41%		
	only peripheral inguinal	75%	93%	70%	59%	81%		
Spleen involved	10%	7%	11%	16%	6%			
Treatment	Chemo-radiotherapy combined	58%	82%	52%				
	nb cycles chimio	average	4	4	5	6	4	
	nb cycles chimio > 4	median	4.76	4.04	4.96	5.3	4.4	
Relapse		27%	22%	28%	39%	18%		
Death		16%	9%	19%	21%	13%		
PFS	average	65	75,7	62,8	42.4	81.8		
	median	53	66	49	37	62		
OS	average	76	82.5	74.5	54	92.1		
	median	64	72	58	45	74		
Diagnosis after 2000		71%	74%	70%	76%	63%		

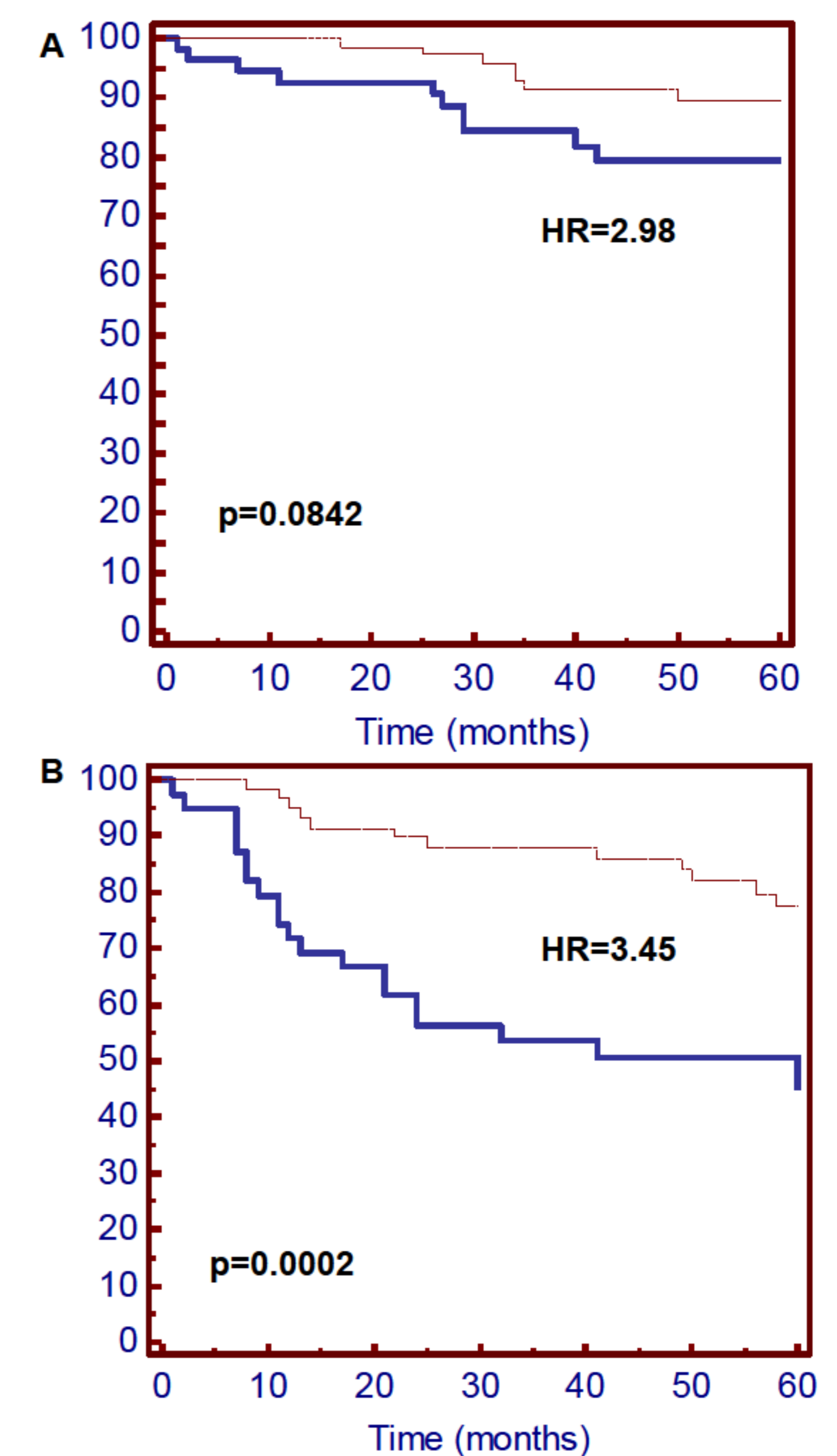


Figure 1: OS (A) and PFS (B) according to treatment : without radiotherapy in blue line and with chemo-radiotherapy combination in red line

CONCLUSIONS

This multicenter retrospective study shows that omission of radiotherapy in responding patients with an IHD is associated with a shorter PFS and a trend to a shorter OS, and suggests that a combined modality therapy has to be proposed to these patients.