

Consolidation radiotherapy after ABVD is effective treatment for selected patients with Hodgkin's lymphoma (HL) with interimPET (iPET) positive scans

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BACKGROUND

- Classical HL has high cure rate even for advanced stages
- Patients with PET positive disease after initial cycles of chemotherapy have a high risk of early relapse and poor outcome
- Gallamini 2014
PFS at 3y: iPET +ve 28%, iPET -ve 95%
- Patients with iPET positive scans are considered for early dose escalation in current clinical trials: RATHL study, SWOG S0816, GITIL/FIL HD0607
- We present here the West of Scotland network outcomes in iPET+ population treated with consolidation radiotherapy alone.

METHODS

West of Scotland haemato-oncology network has population of 2.6 million. Database records staging, treatment and outcome on all patients. We examined records on all HL patients reported as having positive iPET imaging since this was introduced in 2007 (performed in Stage II-IV after 2 cycles chemotherapy). Patients progressing on first line chemotherapy and/or proceeding to dose escalation were excluded as were those deemed PET negative on updated review of imaging. For those with interim positive scans receiving radiotherapy alone at the end of standard ABVD we recorded age, gender, stage, primary chemotherapy and whether there was an end of treatment PET scan performed. We then evaluated radiotherapy fields relative to original sites of disease and sites remaining PET positive on interim imaging. Finally we recorded duration of follow-up to December 2014, progression free survival (PFS) and overall survival (OS).

PET Imaging

Deauville Workshop 2009
Consistent reporting to Deauville 1-5 point score from 2011-2012
More patient specific than previous reporting of SUV alone
High NPV but poor PPV as main limiting factor in FDG PET/CT

RESULTS: Consolidation Radiotherapy n=15

Gender	7 male: 8 female
Age	Range 17-71y : median 33y
Stage Disease	IIA 5 patients IIB-IV 10 patients
Chemotherapy	6 cycles ABVD 12 patients Reduced doses 3 patients
Radiotherapy Fields	Whole involved field 10 Limited mediastinal field 4 2 fields 1
Follow-up duration	7-75 months, median 33m
Progression free survival	87% one relapse at 36m outside radiotherapy field- figure 1
Overall survival	93% (one non lymphoma death)

RESULTS: ABVD alone n=28

iPET+ at previously uninvolved site with good response at IF	n=8
iPET+ other cause incl lung cancer, abscess, colon	n=5
iPET+, subsequent relapse	n=1
Small volume original sites disease, CR at EOT ?FP	n=10
Still PET + at EOT (?False Positive)	n=4
Total interim PET n=244	

CONCLUSIONS

- * Interim PET+ at sites previously uninvolved when known disease has responded are likely to be false positive
- * Importance of consistent Deauville reporting
- * 87% PFS using consolidation radiotherapy alone after standard ABVD in patients with iPET+ at sites of initial disease
- * Radiotherapy field should include whole site of involved disease from original presentation.

Figure 1

Patient who relapsed post radiotherapy

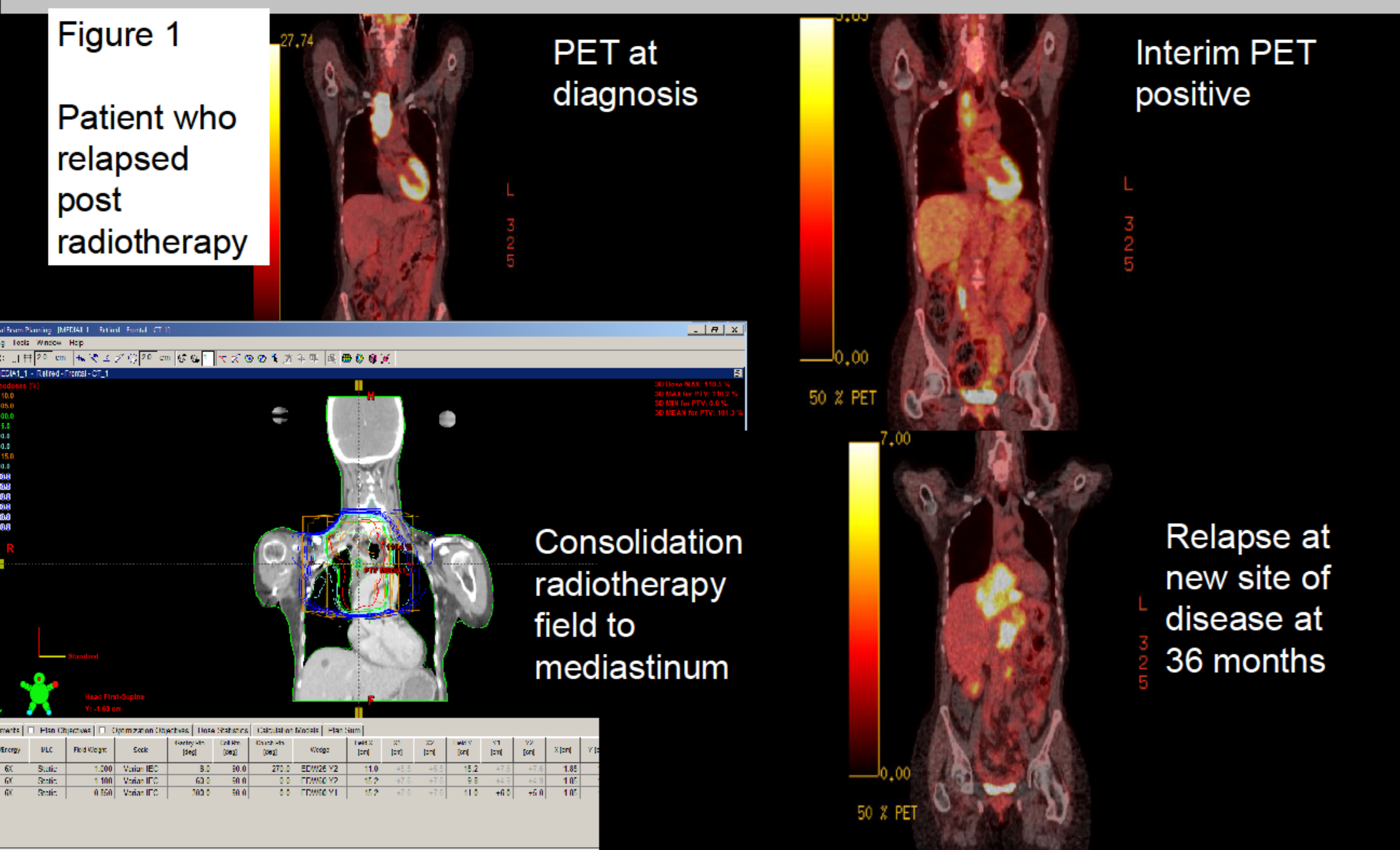


Figure 2

Interim PET positive in mediastinum with consolidation radiotherapy field to cover all involved site of original disease

