4th International Workshop on PET in Lymphoma Menton, October 5th, 2011 Poster Discussion Session

Poster discussion PET in lymphoma

Ulrich Dührsen Department of Hematology University Hospital Essen

Poster discussion – PET in lymphoma

Clinically versus technically oriented studies

19 abstracts on ,PET in lymphoma^e

9 clinically oriented studies

B3, B4, B6, B7, B9, B10, B11, B13, B14

10 technically oriented studies

B1, B2, B5, B8, B12, C1, C2, C3, C4, C5

6 brief presentations

Poster discussion – PET in lymphoma

9 clinically oriented studies

	HL	DLBCL	PMBCL	BL	PCNSL	FL	Sjögren
Pre	B4				B11	B13	
Interim		P 9			B11	(B13)	
Post	В3	₽9	B6, B7	B10	B11	B13	B14

Baseline PET/CT - HL

B4: Angelopoulou et al, Athens, Greece

Entity / study goal: HL / comparison CT vs. PET/CT

Patient selection: availability of bPET/CT

No. of patients: 67, retrospective

Treatment: ?

Results:		PET Stage					
				Ш	<u>IV</u>		
		3	2	2	1		30 % stage shift
Clinical stage (CT)		0	16	1	8		24 % Tx modification justified
		0	3	10	4		10 % Tx modification realized
ľ	V	0	0	0	17	J	64 % wider radiation field (I/II)

PET neg. diffuse multifocal uptake 42 9 8

<u>Conclusions:</u> BMB: High NPV → no BMB required.

CT- vs. PET/CT-based staging hard to compare.

Baseline and end-of-treatment PET - FL

B13: Robin et al, Amiens, France

Entity / study goal: FL / comparison conv. staging, prognostic impact

Patient selection: availability of bPET and ePET

No. of patients: 17, retrospective

Treatment: R-CHOP-14, R-CVP, R-CT + auto-Tx

Results:

Baseline 80 % discordant, 73% pts. more lesions on PET

40 % upstaging of Ann Arbor stage

0 % change in FLIPI (median FLIPI: 3)

End-of-treatment PET	<u>No.</u>	<u>PFS</u>	<u>OS</u>	3-yr-PFS
Negative	13	38 mo.	44 mo.	~ 75 %
Positive	4	19 mo.	31 mo.	~ 25 %

Conclusions: bPET is more sensitive than CT → 40 % upstaging

ePET is a good predictor of survival

Best care for pts. with positive ePET?

End-of-treatment PET/CT – HL

B3: Vassilakopoulos et al, Athens, Greece

Entity / study goal: HL / prognostic factors in ePET-negative pts.

Patient selection: ePET/CT negative

No. of patients: 229 (stage I/II: 73 %; I/IV: 27 %), retrospective

Treatment: $4 - 8 \times ABVD \pm RT \text{ (stage I/II: 95 \%, III/IV: 11 \%)}$

Results: 4-yr. RFS

Stage I/II 96 %

Stage III/IV 81 % (stage III: 88 %; stage IV: 70 %)

< 5 sites 93 % > 5 sites 85 %

Only independent risk factor: stage III/IV vs. stage I/II

Conclusions:

Stage I/II: ePET predicts excellent outcome, no follow-up imaging Stage III/IV: higher relapse rate despite neg. ePET, follow-up imaging

End-of-treatment PET/CT – BL

B10: Eugène et al, Nantes, France

Entity / study goal: BL / comparison convent. staging, prognostic impact

Patient selection: children, mean age 9 years

No. of patients: 18, prospective

Treatment: LMB2001 (stage II: 2; III: 3; IV: 4 cycles)

Results: Conventional Staging

PET Staging $\frac{\text{neg}}{\text{pos}}$ $\frac{\text{pos}}{\text{pos}}$ $\frac{\text{neg}}{\text{pos}}$ $\frac{\text{pos}}{\text{pos}}$ $\frac{\text{2}}{\text{2}}$ $\frac{(2/2 \text{ CS pos.} \rightarrow \text{neg. biopsy})}{\text{7}}$ $\frac{(1/7 \text{ PET pos.} \rightarrow \text{pos. biopsy})}{\text{2}}$

PET CS
NPV 100 % 81 %
PPV 25 % 11 %

<u>Conclusions</u>: High NPV for PET \rightarrow no biopsy required for PET-neg. lesions

Low PPV for PET → biopsy recommended for PET-pos. lesions

End-of-treatment PET/CT – NHL in Sjögren's

B4: Ziakas et al, Athens, Greece

Entity: Sjögren's-associated NHL (6 MALT, 1 DLBCL, 1 SL)

Study goal: correlation with biopsy (lymphoma vs. inflammation)

No. of patients: 8, prospective

Treatment: immunochemotherapy

Results:

Median SUVmax 3.05

Median Tarpley score 2.5

→ strong correlation inflammation - SUV

2 / 8 residual MALT on biopsy, SUVmax 3.8 + 4.2

SUVmax > 3.0: Sensitivity (for residual lymphoma) 100 %, specificity 67 %

SUVmax ≤ 3.0: NPV 100 %

Conclusions: ePET confounded by Sjögren's inflammatory activity.

Biopsy required for differentiation lymphoma vs. inflammation.

Biopsy may be unnecessary at very low SUVmax.

PET in lymphoma

Clinically oriented studies

Brief presentations

- B6. Vassilakopoulos et al, Athens, Greece
 Prognostic significance of post-rituximab-CHOP (R-CHOP) PET/CT in primary mediastinal large B-cell lymphoma (PMLBCL)
- B7. Ceriani et al, Bellinzona, Switzerland
 PET/CT response analysis in primary mediastinal diffuse large B-cell
 lymphoma (PMBL): results of the IELSG-26 study
- B11. Cimarelli et al, Lyon, France
 The role of FDG PET in immunocompetent patients with primary central nervous system lymphoma.