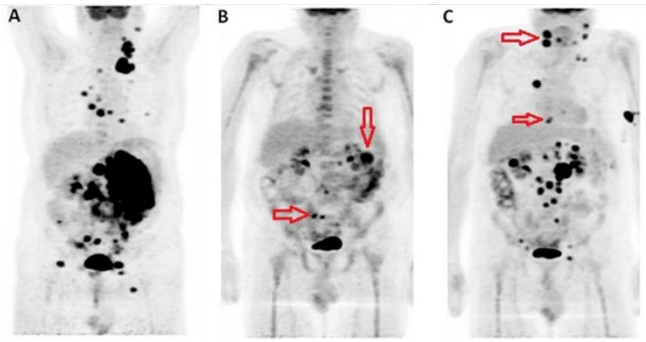
SAMPLE STANDARDIZED REPORT FOR CASE IN FIGURE 2



CLINICAL HISTORY: 30-year-old woman with classic HL, after 4 cycles of ABVD chemotherapy, referred for evaluation of response to therapy.

COMPARISON: FDG PET/CT on _____.

TECHNIQUE: _____ MBq (_____ mCi) of FDG was administered intravenously following a 6-hour fast. Prior to injection, the blood glucose level was _____ mmol/L. After an uptake time of _____ minutes, low-mA noncontrast CT and coregistered emission PET images were acquired from the base of the brain to the proximal thighs.

FINDINGS:

HEAD AND NECK: _____.

CHEST: Decreased size and FDG uptake of previously noted large anterior mediastinal mass.

ABDOMEN/PELVIS: _____.

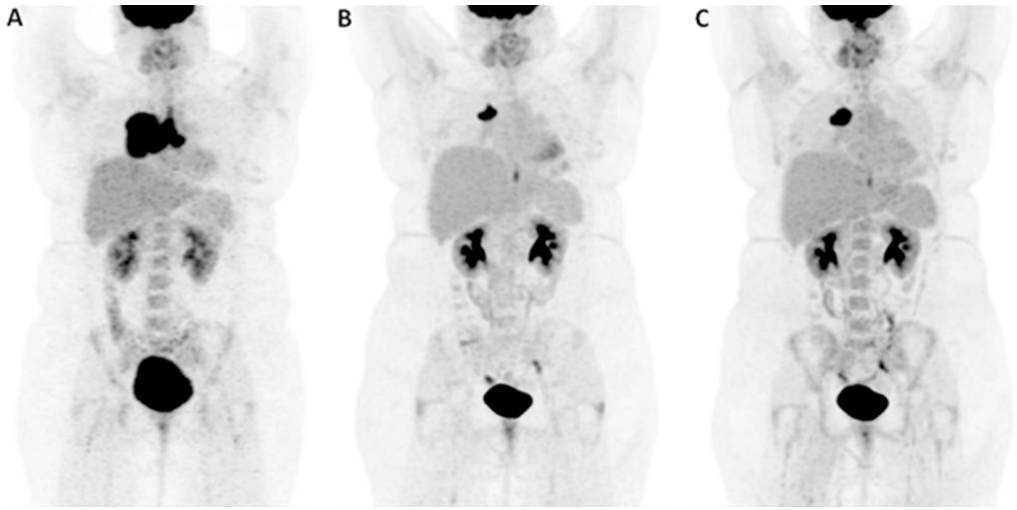
MUSCULOSKELETAL: _____.

INDEX LESIONS:

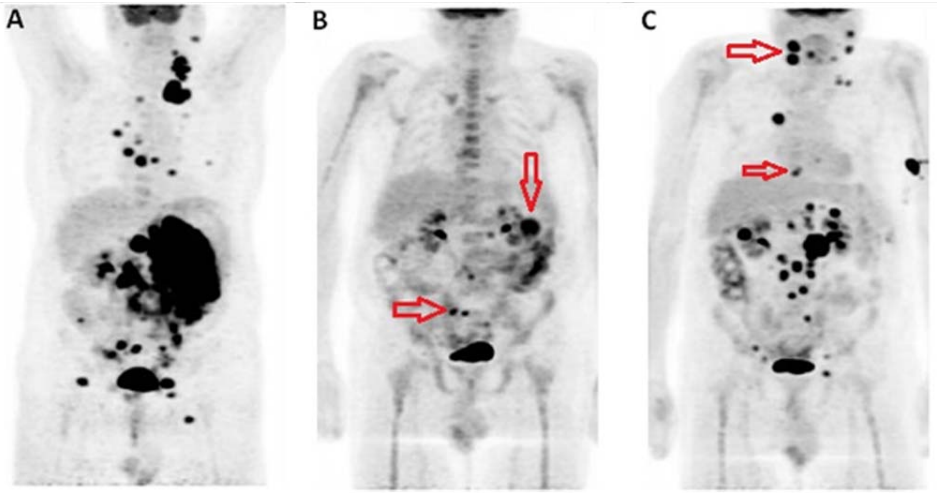
1. Dominant mediastinal mass, CT image _____, 2.8 x 3.7 cm, SUVmax 10.9 (previous CT image _____, 4.7 x 6.8 cm, SUVmax 12.8).

Deauville 5-Point Scale: 5.

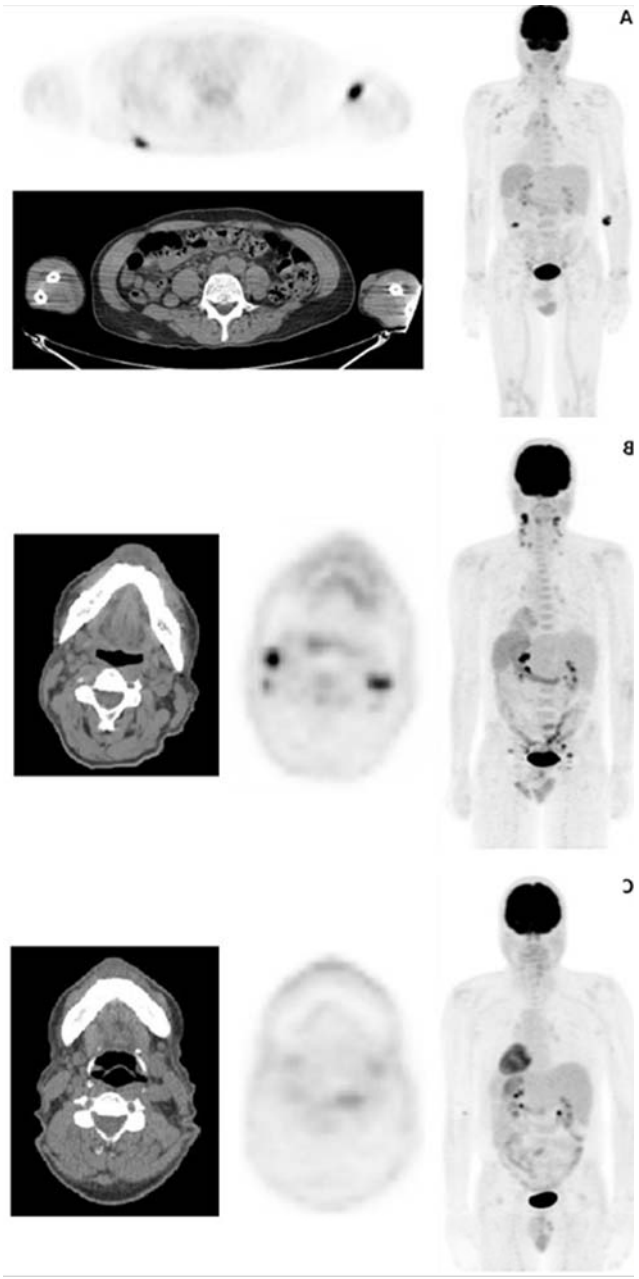
IMPRESSION:
1. Decrease in metabolic activity and size of a mediastinal mass is consistent with a partial metabolic response.



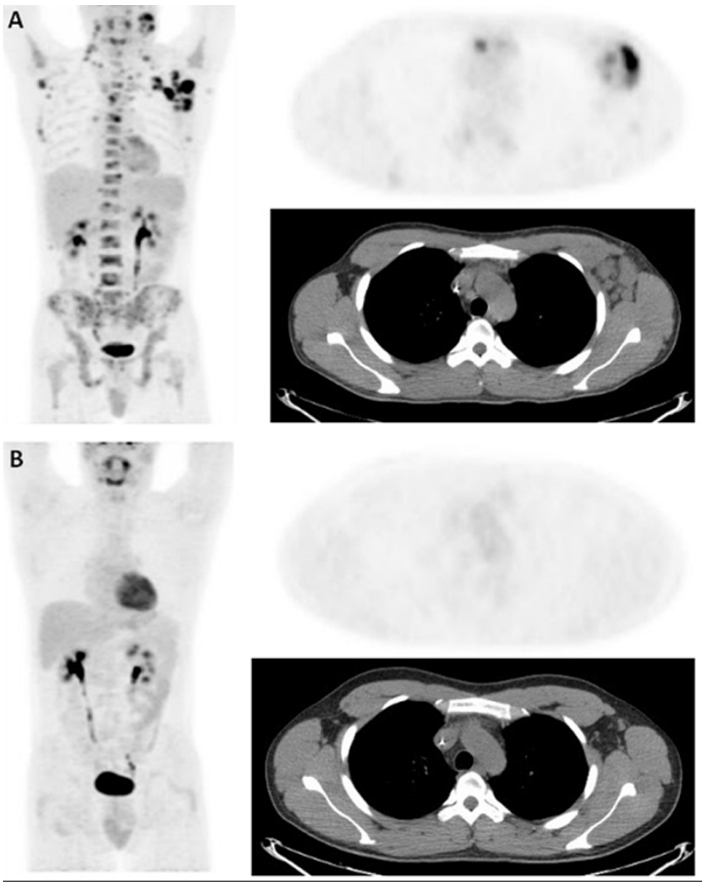
SUPPLEMENTAL FIGURE 1: 30-year-old woman with classic HL. A, MIP image from initial FDG PET/CT study shows hypermetabolic mediastinal lymphadenopathy. B, Interim FDG PET/CT study acquired after 4 cycles of ABVD chemotherapy shows interval improvement, but with persistent intense hypermetabolism within the dominant nodal lesion in the right anterior mediastinum. D5PS score of 5 was assigned, suggesting persistent active disease. Decision was made to continue with ABVD given suggestion of responding disease. C. FDG PET/CT study acquired at completion of ABVD chemotherapy shows interval increase in size and metabolic activity of the dominant right anterior mediastinal nodal lesion. D5PS score of 5 was again assigned. Subsequent biopsy of this mass confirmed persistent active lymphoma, resulting in conversion to second-line therapy.



SUPPLEMENTAL FIGURE 2: 66-year-old man with DLBCL. A, Initial FDG PET/CT study showed extensive hypermetabolic lymphadenopathy in addition to a bulky hypermetabolic extranodal mass surrounding the left kidney. B, Interim FDG PET/CT study acquired after 2 cycles of R-CHOP chemotherapy showed all lesions to have decreased in size and metabolic activity, but with several persistent intensely FDG-avid lesions (e.g., left pararenal mass and lower retroperitoneal nodes as highlighted by arrows). These residual lesions showed FDG uptake which was moderately to markedly greater than liver activity (D5PS score of 4 or 5), but less intense than baseline activity level. Per Lugano response criteria, at the time of interim scan this suggests responding disease (D5PS score of 4 or 5 with reduced uptake compared to baseline and no new or progressive lesions). R-CHOP chemotherapy was continued. C. Subsequent FDG PET/CT study acquired at completion of R-CHOP chemotherapy showed mixed changes: some of the previous FDG-avid lesions showed interval improvement or resolution, but there were multiple new and/or progressive FDG-avid nodal lesions elsewhere when compared with the interim scan. Of note, some of the FDG-avid nodal lesions on this study (highlighted by arrows) were new when compared with the baseline study. Based on Lugano response criteria, category of progressive disease was assigned given D5PS score of 5 including new FDG-avid lesions when compared with the baseline study.



SUPPLEMENTAL FIGURE 3: 66-year-old man with DLBCL. A, Initial FDG PET/CT study showed hypermetabolic subcutaneous soft tissue masses at several sites (selected axial images highlight lesions along right forearm and left flank) and multifocal hypermetabolic lymphadenopathy. B, Interim FDG PET/CT study acquired after 3 cycles of R-CHOP showed mixed changes: all subcutaneous lesions showed metabolic resolution, while lymphadenopathy showed generalized progression at most sites (selected axial images highlight cervical nodal lesions). Based on metabolic progression of nodal lesions, D5PS score of 5 was assigned. This triggered biopsy of a cervical node, which confirmed active lymphoma, resulting in conversion to second-line chemotherapy. C. Subsequent FDG PET/CT study acquired at completion of second-line (R-ICE) chemotherapy showed complete metabolic treatment response. All nodal lesions showed marked interval decrease in size and metabolic activity, with small residual nodal lesions showing only minimal FDG uptake less intense than the mediastinal blood pool (D5PS score of 2). Based on Lugano response criteria, category of complete response was assigned.



SUPPLEMENTAL FIGURE 4: 25-year-old man with classic HL. A, Initial FDG PET/CT study showed multifocal lymphadenopathy above and below the diaphragm and multifocal bone marrow involvement (MIP and selected axial images highlighting axillary lymphadenopathy and marrow-based lesion in manubrium). B, Interim FDG PET/CT study acquired after 2 cycles of ABVD chemotherapy showed complete metabolic resolution of all previous nodal and bone marrow lesions. D5PS score of 1 was assigned, indicating complete metabolic response.

SUPPLEMENTAL TABLE 1: Tumor response classifications of the Deauville 5-point scale (D5PS) criteria

Classification	Criteria
1	No uptake above background activity
2	Uptake equal to or lower than mediastinal blood pool activity
3	Uptake between mediastinal blood pool and liver activity
4	Uptake moderately higher than liver activity
5	Uptake markedly higher than liver activity

TREATMENT REGIMEN ABBREVIATIONS

ABVD: Adriamycin, bleomycin, vinblastine, dacarbazine

BEACOPP: Bleomycin, etoposide, Adriamycin, cyclophosphamide, Oncovin, procarbazine, prednisone

GMAL B-ALL/NHL 2002 protocol: rituximab, high-dose methotrexate, high-dose cytosine arabinoside, cyclophosphamide, etoposide, iphosphamide, corticosteroids, triple intrathecal therapy

MOPP/ABV: Mechlorethamine, Oncovin, procarbazine, prednisone, adriamycin, bleomycin, vinblastine

R-ACVBP: Rituximab, Adriamycin, cyclophosphamide, vindesine, bleomycin, prednisone

R-CHOP: Rituximab, cyclophosphamide, Oncovin, prednisone

R-CVP: Rituximab, cyclophosphamide, vincristine, prednisone

R-HyperCVAD: rituximab, cyclophosphamide, doxorubicin, vincristine, dexamethasone alternating with cytarabine, methotrexate

R-ICE: Rituximab, ifosfamide, carboplatin, etoposide

SMILE: Dexamethasone, methotrexate, ifosfamide, L-asparaginase, etoposide

R-FM: rituximab, fludarabine, mitoxantrone