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Gallbladder Involvement of Diffuse Large B-Cell Lymphoma with ^{18}F-FDG PET/CT

^{18}F-FDG PET/CT Görüntüleme ile Diffüz Büyük B Hücreli Lenfomanın Safra Kesesi Tutulumu

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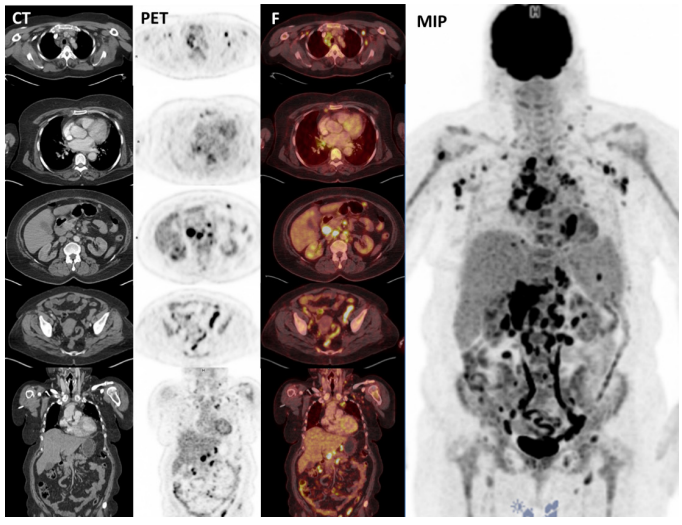

Figure 1. Involvement of multiple lymph nodes with high radiopharmaceutical uptake in supra- and infradiaphragmatic lymphatic stations.

CT: Computed tomography, PET: positron emission tomography, F: fusion, MIP: maximum intensity projection.

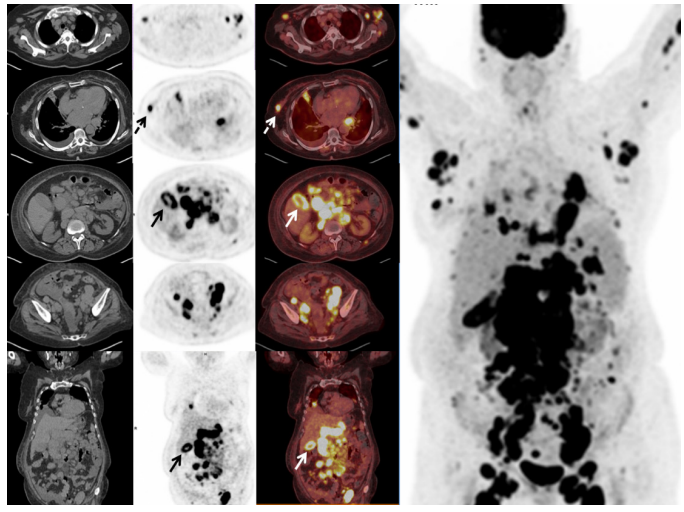

Figure 2. Increased ^{18}F-FDG uptake was observed in newly developed metastatic nodes in addition to previous lesions in the supra/infradiaphragmatic regions on posttreatment PET/CT. Additionally, focal ^{18}F-FDG uptake (dashed arrows) in the upper outer quadrant of the right breast and unexpected gallbladder (GB) wall involvement (arrows) were observed.

CT: Computed tomography, PET: positron emission tomography, F: fusion, MIP: maximum intensity projection.

^{18}F-Fluoro-2-deoxy-glucose positron emission tomography/computed tomography (^{18}F-FDG PET/CT) is widely used in staging, restaging, and evaluation of treatment response in patients with lymphoma. In this case report, a 59-year-old woman diagnosed with diffuse large B-cell lymphoma (DLBCL) with gallbladder involvement is presented. Immunohistochemical analysis showed strongly positive CD79a, bcl-6, MUM1, bcl-2, and CD43; weakly positive CD20 and CD5 staining; negative c-myc; and Ki-67 of 85%. Interim ^{18}F-FDG PET/CT showed involvement of multiple lymph nodes with high radiopharmaceutical uptake in supra- and infradiaphragmatic lymphatic stations (Figure 1). On the other hand, increased ^{18}F-FDG uptake was observed in newly

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developed metastatic nodes in addition to previous lesions in the supra/infradiaphragmatic regions on posttreatment PET/CT. Additionally, focal ^{18}F-FDG uptake (dashed arrows) in the upper outer quadrant of the right breast and unexpected gallbladder (GB) wall involvement (arrows) were observed (Figure 2).

^{18}F-FDG PET/CT is a diagnostic method for detecting metastatic lesions in GB [1,2,3]. Although the involvement of the breasts and thyroid in non-Hodgkin's lymphoma is frequently reported, involvement of the GB is extremely rare [4,5,6]. Al-Katib et al. [7] detected extranodal involvement of the GB in an 83-year-old male with intravascular large B-cell lymphoma. Bai et al. [8] reported increased ^{18}F-FDG uptake in the GB without luminal pathology in a 15-year-old girl with Hodgkin's disease. In our case, ^{18}F-FDG PET/CT imaging revealed DLBCL-related involvement in the GB. PET/CT is a useful tool for demonstrating unexpected organ involvements, such as in the GB.

Keywords: ^{18}F-FDG PET/CT, Gallbladder, Non-Hodgkin's lymphoma

Anahtar Sözcükler: ^{18}F-FDG PET/BT, Safra kesesi, Non-Hodgkin lenfoma

Ethics

Informed Consent: The patient provided verbal and written consent for the use of the medical findings for research purposes.

Authorship Contributions

Surgical and Medical Practices: T.A.; Concept: E.A., T.F.Ç., Design: E.A.; Data Collection or Processing: G.A.; Analysis or Interpretation: T.A., T.F.Ç.; Literature Search: G.A.; Writing: E.A.

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