Interesting Image
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A Rare Hernia Mimicking Implant in a Patient with Rectal Adenocarcinoma: Internal Herniation

Rektal Adenokarsinomlu Bir Hastada İmplantı Taklit Eden Nadir Bir Fıtık: İnternal Herniasyon

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Abstract

Internal herniation may be seen more frequently in patients with intra-abdominal surgery and malignancy history. We presented a 58-year-old male patient diagnosed with rectal adenocarcinoma seven years ago with a history of surgery and pelvic radiotherapy. When the abdominal computed tomography (CT) image was taken during routine oncology follow-up, a lesion mimicking a serosal implant on the anterior abdominal wall was detected. ^{18}F-fluorodeoxyglucose (FDG) positron emission tomography (PET)/CT imaging was performed the suspicion of recurrence. It was concluded that the lesion, which was evaluated as an implant in abdominal CT with ^{18}F-FDG PET/CT imaging, was a spontaneously reducing internal herniation. ^{18}F-FDG PET/CT imaging in cancer patients is crucial in illuminating the suspicion of recurrent lesions in these patients and sheds light on the course of the patients in oncology practice.

Keywords: Internal hernia, mimicking implant, ^{18}F-FDG PET/CT, rectal adenocarcinoma

Öz

İnternal herniasyon karın içi cerrahi ve malignite öyküsü olan hastalarda daha sık görülür. Biz bu olgu sunumunda, 7 yıl önce rektal adenokarsinom tanısı almış, cerrahi ve pelvik radyoterapi öyküsü olan 58 yaşında erkek hastayı sunduk. Hastada rutin takiplerde çekilen abdomen bilgisayarlı tomografide (BT) karın ön duvarında serozal implant şüphesi olan lezyon saptandı. Nüks şüphesiyle çekilen ^{18}F-florodeoksiglukoz (FDG) pozitron emisyon tomografi (PET)/BT ile BT'de implant olarak değerlendirilen lezyonun, spontan redüksiyon yapan internal herniasyon olduğu sonucuna varıldı. Kanser hastalarında ^{18}F-FDG PET/BT görüntüleme bu hastalarda nüks şüphesinin aydınlatılmasında önemlidir ve onkoloji pratiğinde hastaların seyrine ışık tutar.

Anahtar kelimeler: İnternal herni, implant taklidi, ^{18}F-FDG PET/BT, rektal adenokarsinom

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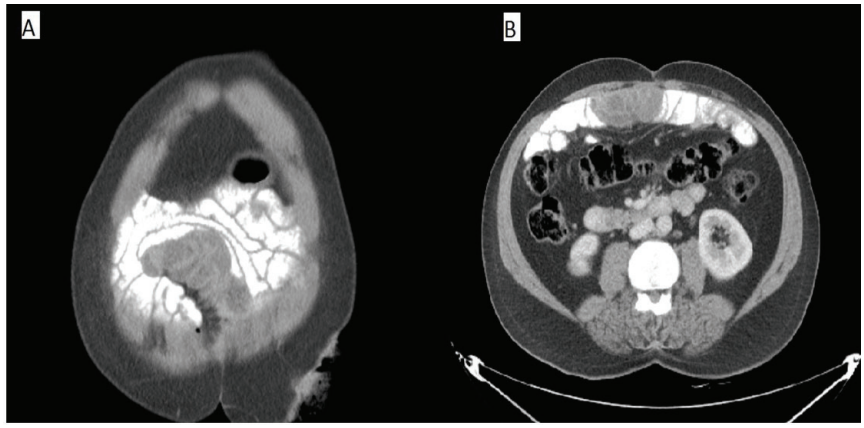


Figure 1. Internal hernia is mostly found incidentally, the literature has reported that sometimes accompanying malignancies cause herniation (1,2). In cases with an incidental internal hernia, atypical localization of the intestinal loops is often present without obstruction in the lumen. Internal hernias occasionally show spontaneous reduction and are often confused with many diseases (3,4). Contrast-enhanced coronal (A) and axial (B) sections of abdominal computed tomography (CT) imaging revealed a suspicious, cystic-necrotic appearing lesion mimicking the serosal implant on the anterior abdominal wall. The patient had a history of low anterior resection (LAR) after neoadjuvant chemoradiotherapy. The patient had no clinical symptoms, and tumor markers were at a normal level. The mesenteric fatty planes adjacent to the lesion were homogeneous, and no additional findings consistent with malignancy were found on the contrast-enhanced diagnostic abdominal CT.

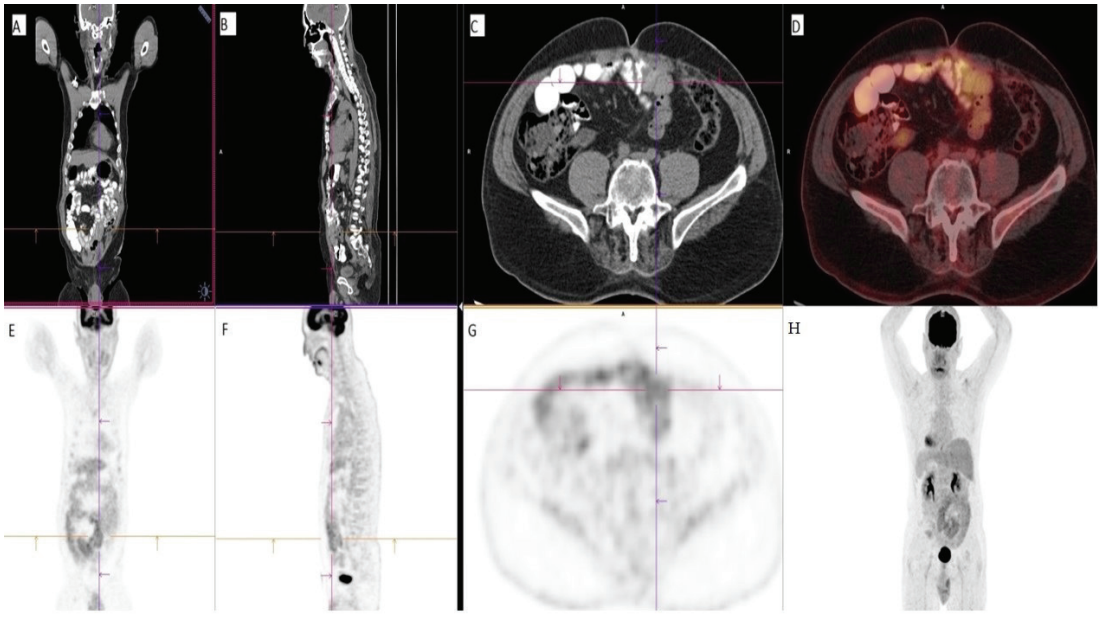


Figure 2. In patients with malignancy with a history of surgery, internal hernia should be considered in the differential diagnosis of lesions with suspected malignancy. Before making treatment decisions, the contribution of oncologic ^{18}F-fluorodeoxyglucose (FDG) positron emission tomography (PET)/CT imaging, which reflects the metabolic status of suspicious lesions, is crucial (5,6). Findings that are not associated with malignancy but are detected incidentally on PET/CT scanning are becoming more common (7). Coronal (A)-sagittal (B) and axial (C) sections of CT images, axial section of fusion image (D), coronal (E)-sagittal (F) and axial (G) sections of PET images, and maximum intensity projection (H) image of PET/CT scan was performed patient with a suspicious implant lesion on the anterior abdominal wall. ^{18}F-FDG PET/CT scan showed that the suspicious lesion, which seen on abdominal CT disappeared. It was observed that there was an oral contrast material passage in the existing intestinal loops in this region, and there was no pathological ^{18}F-FDG uptake compatible with the implant on the anterior abdominal wall. Thus, thanks to PET/CT imaging, we excluded the diagnosis of implant and recurrent disease in our patient. When CT images of the abdomen were re-evaluated together with PET/CT images, it was seen that the suspicious lesion was observed as a sac on diagnostic CT, and it was compressing the small intestines in this state. Additionally, the convergence of adjacent mesenteric fatty planes and vascular structures into the sac was detected as supporting internal herniation. In a patient with rectal cancer with a history of LAR and radiotherapy, it was concluded that the image that was first evaluated as an implant on CT was internal herniation that was spontaneously reduced by ^{18}F-FDG PET/CT scanning.

Ethic

Informed Consent: Patient consent was obtained.

Peer-review: Externally and internally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: S.G., M.B., H.G., C.K., Concept: S.G., Design: S.G., Data Collection or Processing: S.G., M.B., H.G., Analysis or Interpretation: S.G., M.B., H.G., Literature Search: S.G., M.B., Writing: S.G., M.B., H.G.

Conflict of Interest: No conflict of interest was declared by the authors.

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