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A Case of Intraabdominal Gossypiboma Detected in FDG PET/CT Examination

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Abstract

18F-fluorodeoxyglucose (FDG) positron emission tomography (PET) combined with computed tomography (CT) has become the standard for staging, restaging and response assessment of various malignancies. However, in infectious and inflammatory conditions, nonspecific FDG uptake may occur and mimic a tumor. Here, we present a case of gossypiboma in the abdominal region in which FDG uptake was detected in a patient who was operated for gynecological malignancy.

Keywords**:** *18F-fluorodeoxyglucose positron emission tomography, gossypiboma, textileoma, intraabdominal.*

Introduction

Gossypiboma or textileoma is defined as a surgical gas tampon or compress forgotten in the body after surgery. Gossipiboma is a combination of the Latin words gossypium (cotton) and the Swahili word boma (hiding place). Gossypiboma is a rare, difficult to diagnose, often asymptomatic, usually detected incidentally in imaging modalities, and is a serious surgical complication that can cause morbidity-mortality and lead to social and legal problems (1). The true incidence is difficult to estimate. In some cases it may not be reported. It has been reported as 1 in 100 to 3000 in all surgical procedures and 1 in 1000 to 1500 in intra-abdominal operations (2). Although it is often in the abdominal cavity, rare cases detected in the intrathoracic region, leg, shoulder and pericardial cavity on PET/CT have been reported in the literature (3-16).

In this article, a 39-year-old female patient who underwent myomectomy and right ovarian cystectomy 1 month ago and subsequently presented with complaints of abdominal pain, and as a result of the examinations, gossypiboma was detected in the abdomen will be presented.

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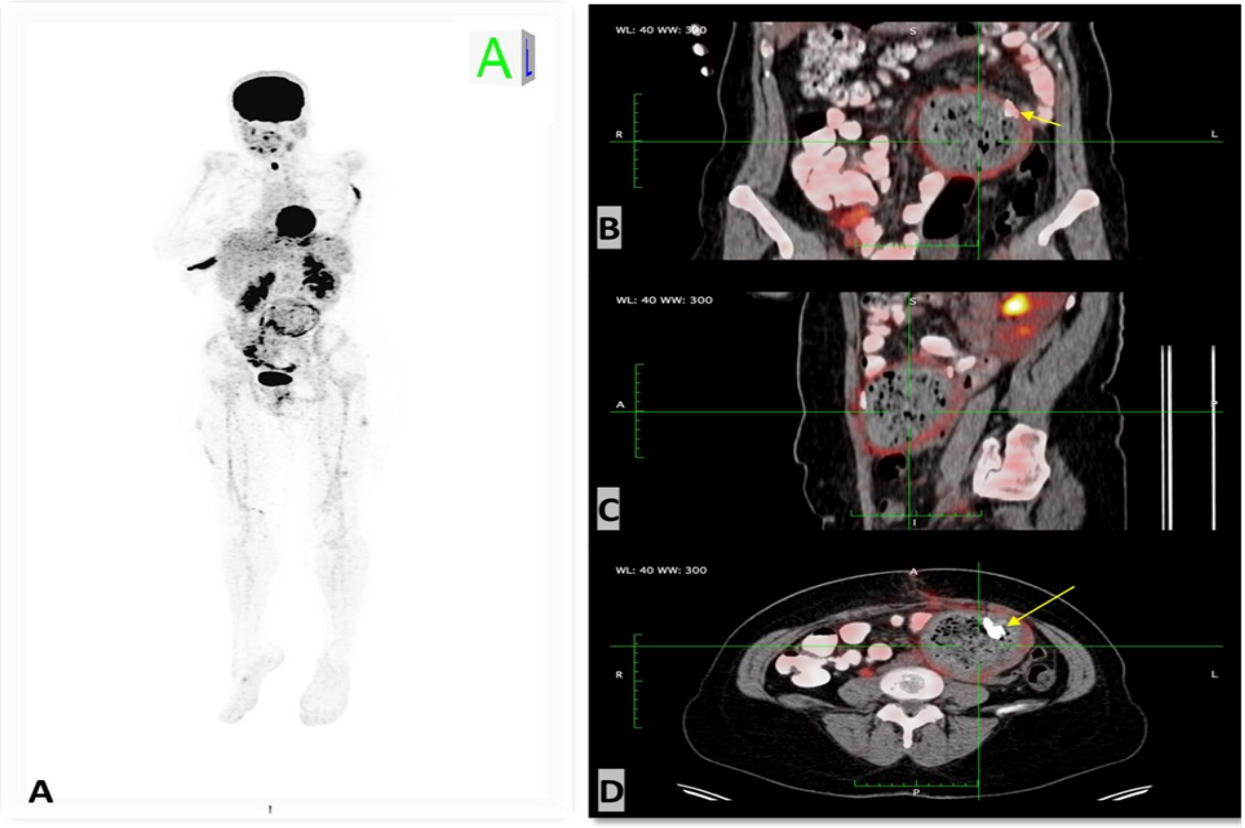
Case

A 39-year-old female patient applied to the gynecology clinic complaining of abdominal pain. From her history, it was learned that she had 1 cesarean section and 1 normal birth, and about 1 month ago she had an abdominal hysterectomy and right ovarian cystectomy at an external center due to myoma, and the pathological diagnosis was leiomyosarcoma. Thereupon, the patient was sent for PET/CT examination for staging purposes. Following a 4-hour fast, 9.6 mCi F-18 fluorodeoxyglucose (F-18 FDG) was administered i.v. One hour after injection, the calvarium and sole were scanned with a Siemens Biograph LSO HIREZ integrated PET/CT scanner. Maximum intensity projection (MIP) image (A) and coronal, sagittal, transaxial PET/CT slices (B, C,D); A heterogeneous lesion of 76 mm in size, centrally hypometabolic, peripherally hypermetabolic (maximum standard uptake value: 11.2), well-circumscribed, thick-walled, spongiform appearance with air images and metallic artifacts (yellow arrows in B,D) was observed in the upper part of the abdomen, anteriorly to the left of the midline. It was understood that this finding was gossypiboma/textilloma due to the foreign body forgotten after surgery and the accompanying foreign body reaction. The natural evolution of the forgotten surgical sponge within the body, if aseptic, is to cause a foreign body reaction and organize to form a foreign body granuloma that can mimic a soft tissue neoplasm (2). In our case, this condition was detected as a mass lesion showing environmental hypermetabolism in the FDG PET/CT examination, and a differential diagnosis was made thanks to PET/CT and CT consultation. Textillomas can cause false positive results on PET



images. In the evaluation of hypermetabolic mass lesions detected on PET images, CT images may assist in the differential diagnosis.

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Authorship Contributions

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