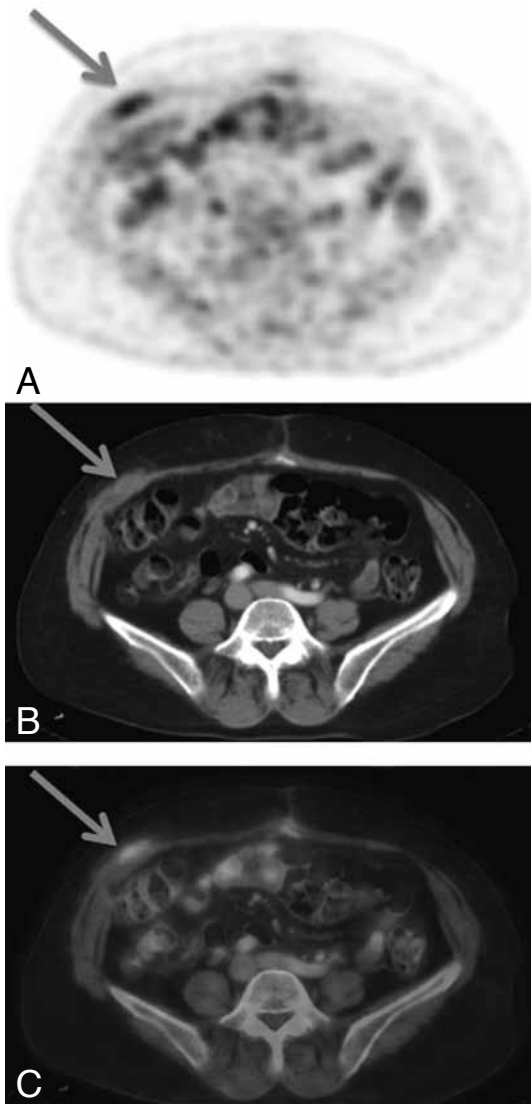


## IMAGES IN CLINICAL RADIOLOGY



### *Port-site metastasis after explorative laparoscopy for an incidental appendiceal mucinous cystadenocarcinoma detected with FDG PET/CT*

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A 62-year old female with a history of appendix carcinoma came to our department for an 18 F FDG PET/CT to further characterize a subcutaneous fixed small mass in the right fosse detected at clinical examination. Fourteen months earlier, she had undergone a right hemicolectomy because of an appendiceal mucinous cystadenocarcinoma. Since the diagnosis of appendicitis was presumed before she went into surgery, an explorative laparoscopy was performed. An inflammatory mass with loss of all anatomical references was found; hence the laparoscopy was reverted to a laparotomy.

18 F FDG PET demonstrated a hypermetabolic focus in the muscle layer of the right lower abdominal wall, in the scar where a trocar had been inserted. It is well known that scar tissue can be 18F FDG positive in the active healing phase up to 8 weeks, due to the unspecific associated inflammatory reaction. In this case however, the surgical procedure was performed 14 months ago. Further more, the metabolic activity was focal and corresponded with a heterogeneous nodular lesion that showed peripheral contrast enhancement on CT (Fig. A). The patient was referred for surgery and the port-metastasis was resected. To our best knowledge, this is the first case reporting a port-site recurrence of an appendiceal mucinous cystadenocarcinoma in a trocar scar after explorative laparoscopy.

#### *Comment*

Primary appendiceal cancer is rare and accounts for 0,5% of all intestinal malignancies. The mucinous cystadenocarcinoma is the second most prevalent subgroup. The understanding of the etiology of port-site metastasis development has decreased the incidence over time from 21% to 1%, which is comparable to the incidence of scar metastases after open surgery. Port-site metastases often occur in the presence of advanced disease, but it is not exceptional for them to occur in isolation. The metabolic information obtained by 18 F FDG PET has a high positive predictive value for the detection of abdominal wall metastasis, once the acute healing phase (up to 8 weeks) has passed. Hybrid imaging with 18 F FDG PET/CT will allow detection, characterization and anatomical localization of occult lesions, as well as potential additional concomitant lesions.

#### *Reference*

1. Goshen E., Davidson T., Aderka D., Zwas S.T.: PET/CT detects abdominal wall and port-site metastases of colorectal carcinoma. *Br J Radiol*, 2006, 79: 572-577.

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