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# Hypermetabolic Gall Bladder Wall Thickening Mimicking Benign Process: Adenomyomatosis

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**Abstract**

64 year old female patient who attended hospital for jaundice was referred for F-18 FDG PET-CT to determine malignant biliary obstruction. The imaging showed hypermetabolic thickening of the lateral gall bladder wall which was mimicking adenomyomatosis radiologically. The pathology results revealed gall bladder cancer.

***Keywords*****:** *gall bladder, wall thickening, adenomyomatosis, FDG, PET/CT.*

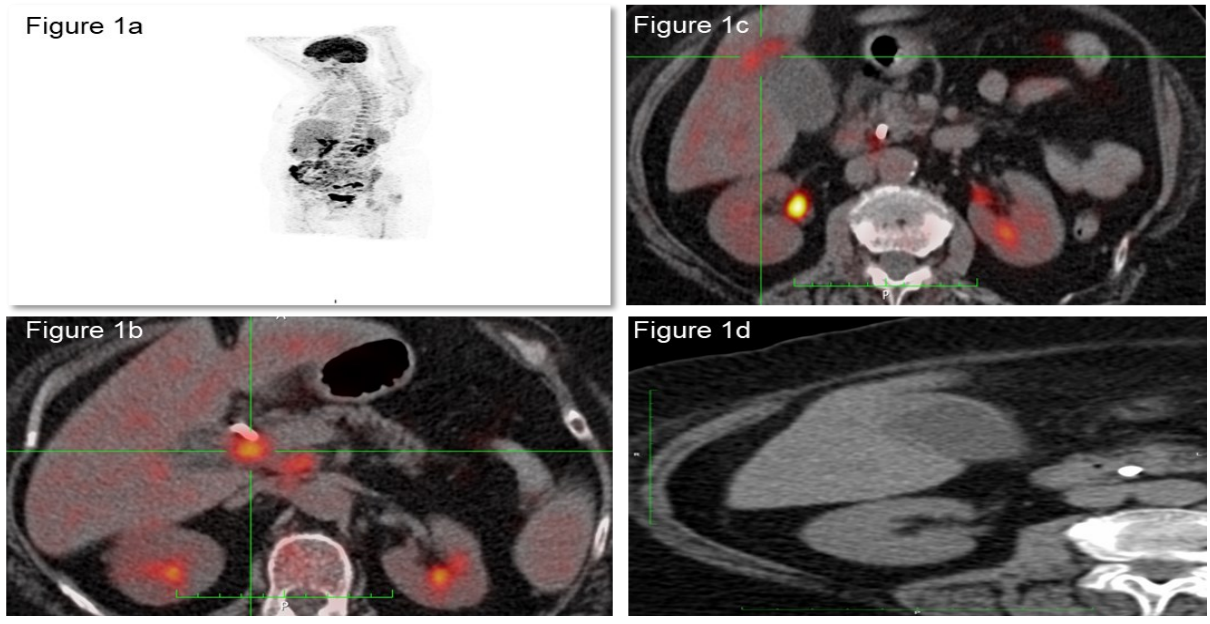


**Figure 1:** A 64-year-old woman, who had the complaint of jaundice, was referred for FDG PET-CT. Maximum intensity projection images (a) of the patient revealed hypermetabolic lesions around the pancreas head as

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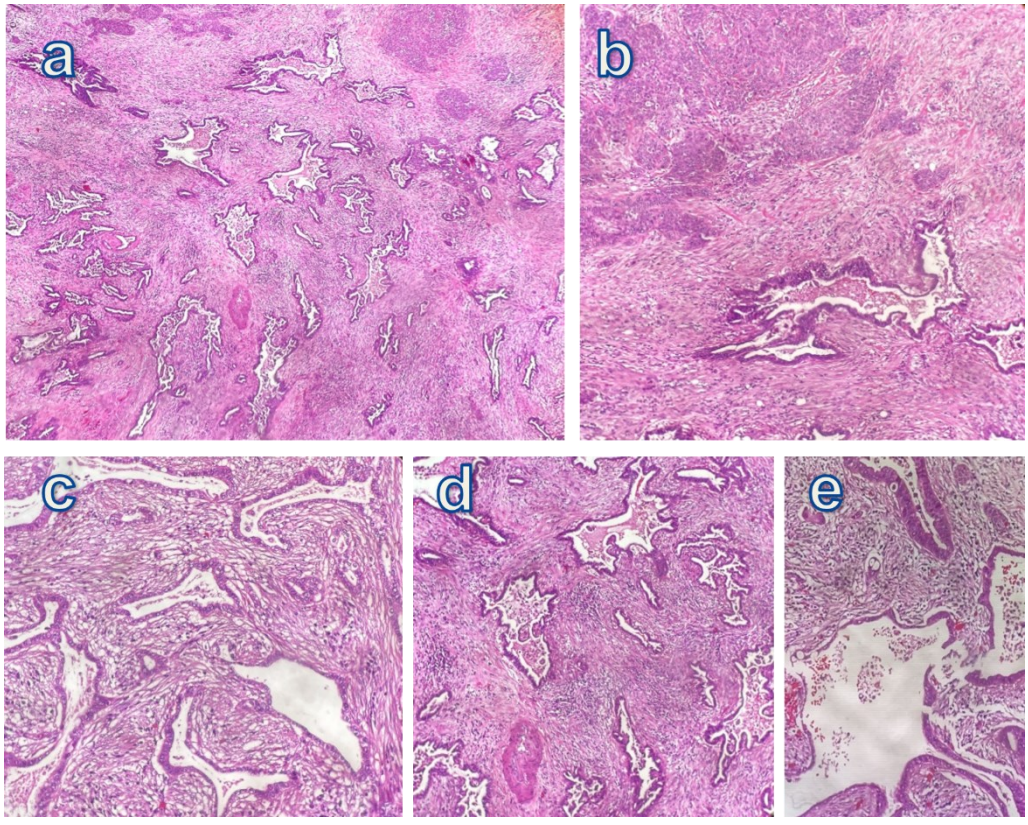
well as hypermetabolic wall thickening of gall bladder in cross sectional images in corresponding transaxial slices (b) and (c). However the radiologic appearance was considered as adenomyomatosis (d). The adenomyomatosis and cholesistitis are differential diagnosis of hypermetabolic wall thickening (1). Half of the patients with hypermetabolic gall bladder wall thickening was pathologically benign in a series with 24 patients (2). Previous case reports and series reported conflicting results about the FDG uptake related to adenomyomatosis (3, 4). Adenomyomatosis is a benign condition characterized with epithelial proliferation into the thickened muscular layer (4) and the incidence of this entity is 2.8-5% (5). The diagnostic comparison of the diffusion weighted MR and PET-CT showed that benign lesions might be differentiated preoperatively by these imaging modalities but the differential diagnosis of adenomyomatosis from gall bladder carcinoma is a major issue (6, 7). Another case report with coexisting adenomyomatosis and gall bladder carcinoma has been reported previously (8).

**Figure 2:** Deeply infiltrative tumour with abundant desmoplasia. Photomicrograph depicting both squamous cell (upper left) and adenocarcinoma (upper right) components (2a, 2b). Invasive glands, some of which are extremely large (2c, 2d, 2e).

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**Authorship Contributions**

**Concept:** Z.P.K., P.P.O., F.D.A., E.Z.C., **Design:** Z.P.K., **Supervision:** Z.P.K., P.P.O., F.D.A., E.Z.C., **Data Collection and/or Processing:** Z.P.K., P.P.O., F.D.A., E.Z.C., **Analysis and/or Interpretation:** Z.P.K., **Literature Review:** Z.P.K., **Writer:** Z.P.K.

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