Mucinous Adenocarcinoma Arising from Diffuse Serrated Adenoma of the Appendix which Mimics Appendicular Abscess

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A 69-year-old woman was admitted to our hospital with sudden onset of severe right lower abdominal quadrant pain. Ultrasonography revealed loculated fluid collection at the right inguinal region. Computed tomography (CT) showed a 34 x 47 mm rim enhancement cystic lesion including an air bubble, which was evaluated as appendicular abscess (Fig. 1). The patient underwent ultrasound-guided percutaneous drainage. The aspirate was of gelatinous consistency but not concordant with an abscess. Multiplanar reformatting (MPR) images showed an appendiceal lesion that extended to the caecum (Fig. 2). A polypoid mass arising from the appendix was detected during surgery. Pathologic examination revealed invasive mucinous adenocarcinoma arising from a diffuse serrated adenoma of the appendix. A representative fragment of the appendix mucosa with diffuse involvement by dysplastic serrated adenoma is shown (Fig. 3).

Primary carcinoma of the appendix is rare, less than 0.5% of all gastrointestinal neoplasms [1]. The mucinous adenocarcinoma arising from the diffuse serrated adenoma supports the presence of a serrated appendiceal carcinoma [2]. Appendiceal carcinomas usually present as acute appendicitis or as a palpable mass [3, 4]. The patient presented with a clinical impression of appendicular abscess. An appendiceal cancer generally shows no specific symptoms, and most of the malignancies are diagnosed incidentally after pathological examination: nevertheless, appendiceal carcinomas usually present as advanced invasive carcinomas [3, 5]. MPR imaging is important to determine intraluminal invasion to the caecum for the diagnosis of serrated appendiceal carcinoma.

Appendiceal mucinous adenocarcinoma arising from a diffuse serrated adenoma that mimics appendicular abscess is rarely seen. Advanced imagining techniques such as MPR could help in the diagnosis.

References