**Appendiceal mucocoele**

**Unique cause of appendicitis-like abdominal pain**

**INTRODUCTION**

Despite appendicitis being one of the most common condition causing right lower quadrant abdominal pain and requiring surgical intervention, in every day practise right lower quadrant pain can be indicative of a vast list of differential diagnoses and is thus a challenge for the radiologists and clinicians. Appendiceal mucocoeles, due to non-neoplastic or neoplastic lesions, are rare pathology presenting with appendicitis-like abdominal pain or occurring as an incidental finding. We present and illustrate two clinical cases of simple and neoplastic appendiceal mucocoele with short differential diagnosis of other possible cystic mimickers in right lower quadrant.

**DISCUSSION**

Mucocoele of the appendix is an uncommon pathology, the preoperative diagnostic and treatment challenge. The clinical presentation of the disease is usually unpecific, with difficult prospective clinical diagnosis. Half of the cases are asymptomatic and often stable for many years or detected incidentally during radiologic/endoscopical examinations or as a result of surgery for unrelated symptoms. The most common clinical manifestation is pain with or without palpable mass in the right lower quadrant of the abdomen [1]. Therefore a clinician may mistake it for acute appendicitis. Rarer manifestations include weight loss, nausea and vomiting, GI bleeding, signs of intussusception of the intestines, localized rupture or peritoneal spread [2].

At US, an ovoid, elongated or encapsulated cyst mass in the expected position of the appendix with or without acoustic shadowing from dysorphic mural calcification is characteristic of mucocoele from mucinous neoplasms. The intraluminal echotexture can have a variable appearance, but an internal onion-skien appearance, which represents lamellated mucin, is considered pathognomonic [3]. US, as the first-line diagnostic method, can be used to differentiate between mucocoele and acute appendicitis.

Appendiceal diameter 15 mm and more has been determined as the threshold for mucocoele diagnosis with sensitivity of 83 % and specificity of 97 % [4]. CT is the best for evaluating mucocoeles of the appendix because it can demonstrate relationship between the tumor and the cecum is more obvious on CT images than it is on US images. CT is more sensitive than MR imaging for detecting small mural calcifications. Mural curvilinear or punctate calcification confirms the mucocoele diagnosis and differs from the appendiceal abscess, which does not have this characteristic. Simple mucocoeles have a smooth wall of variable thickness, the presence of enhancing wall nodularity helping differentiate simple mucocoele from neoplastic mural expansions, a blisstered appearance and extra-appendiceal mucin deposits raises the possibility of malignant mucocoele [4].

Appendiceal obstruction from a caecal carcinoma, an important potential pitfall, is distinguished by the presence of a focal solid enriching caecal mass typically without mucocoele formation [5].

CT is particularly useful in detecting mucin outside the appendix. On imaging, pseudomyxoma peritonei typically has low or intermediate attenuation values, irregular peritoneal and omental thickening, septations and serral implants. PMP has the same imaging features as carcinomatosis from mucinous colorectal and other malignancies, but the appendix is the most common primary site for PMP [5].

**CONCLUSIONS**

Appendiceal mucocoele is a rare condition, but should be included into differential diagnosis, if a cystic mass in the right lower quadrant of the abdomen is found during radiological examination. It is important for the radiologist to be familiar with multi-modality appearances of this condition so that potential confusion with abdominal masses of other etiologies could be avoided.

**REFERENCES**