



**MUCINOUS CYSTADENOMA OF APPENDIX.**

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Article Received on 05/05/2017

Article Revised on 24/05/2017

Article Accepted on 14/06/2017

**INTRODUCTION**

Mucinous cystadenoma of the appendix is a rare tumor of the appendix. It is found in 0.2 to 0.3% of resected appendices in Europe and the United States.<sup>[1,2]</sup> It is characterized by villous adenomatous changes of the appendiceal epithelium associated with marked distension of the appendiceal lumen with mucin. Acute abdominal pain like acute appendicitis is the common most presentation but about 25-30% patients are asymptomatic and condition is found incidentally on imaging or during operation.<sup>[3,4]</sup> The accurate preoperative diagnosis is the key in the management. Surgical excision without rupture is of paramount importance. Extent of surgery may be with or without Colonic resection, because of fear complications like Intestinal Obstruction and Spontaneous or Iatrogenic rupture of this neoplasm causing spillage of neoplastic cells causing Pseudomyxoma peritoni which is suppose to be a fearful condition. Laparoscopic Surgery is contraindicated in Mucinous cystadenoma of Appendix.<sup>[5,6]</sup> Recent reports suggest a safe laparoscopic surgical approach using a gauze technique.<sup>[5,7]</sup>

**KEYWORDS:** Appendix, Mucocele, Mucous Cystadenoma.

**CASE HISTORY**

A 39 years male patient, presented with a anterior abdominal wall mass, with occasional pain in abdomen. Clinical examination revealed that it is a mass in the anterior abdominal wall. On USG examination it was diagnosed as retroperitoneal tumor very close to iliac vessels. The CECT was suggestive of Hypodense mass of 8 cms x 4 cms. in the retroperitoneum on the right side with abutment to iliac vessels but no evidence of any lymphadenopathy in the retroperitoneum. FNAC from the mass suggestive of Spindle cell tumor.

Reports on blood investigations were unremarkable. Chest X ray was normal. We planned to explore this patient as it was reported retroperitoneal mass of spindle cell origin, with close relationship with iliac vessels. We thought that it was unsafe to try the laparoscopic intervention. Under Spinal anesthesia, With a lower mid line incision we opened the abdomen and findings to our surprise, there was a Cystic mass adherent to the anterior abdominal wall. we opened the peritoneum, the mass was found to be arising from the tip of appendix. There were lot of omental adhesions around the mass. There was no evidence of any acute appendicitis. Standard appendectomy was done. Report on Histopathology examination of the resected specimen revealed mucinous cystadenoma of the appendix without evidence of cancer. The patient made an uneventful recovery after surgery and was discharged on postoperative day 5.

**DISCUSSION**

Mucocele of the appendix is caused by a retention cyst, epithelial hyperplasia, mucinous cystadenoma or mucinous cystadenocarcinoma is found in 0.2–0.3% of resected appendices in Europe and the United States<sup>[1,2]</sup> This pathological entity of the appendix was first described by Rokintansky and divided into benign and malignant types.<sup>[8]</sup>

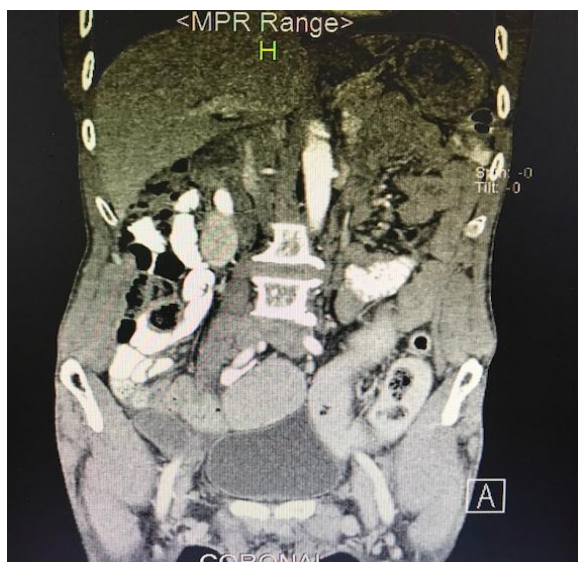
The external appearance is gross enlargement of an appendix, whose lumen is distended by mucin. Even in benign disease such as cystadenoma, dissemination of mucin-producing cells into the peritoneal cavity can cause Pseudomyxoma peritonei. Since its diagnosis in terms of malignancy or benignity is difficult before surgery, it is important to remove it without rupture of the lesion.

In our case the tumor was diagnosed as retroperitoneal mass with spindle cell appearance. On exploration we got this findings of a cystic tumor arising from the tip of the appendix. We did conventional appendectomy without any colonic resection because it was about 7.5 cms away from the base of appendix. Preoperative diagnosis is usually difficult because paucity of symptoms and nonspecific presentation of these patients. In this case the noninvasive diagnostic modalities employed were Ultrasonography and CT scan. Despite use of many diagnostic investigations the correct diagnosis is possible only in 30% of patients.<sup>[9]</sup>

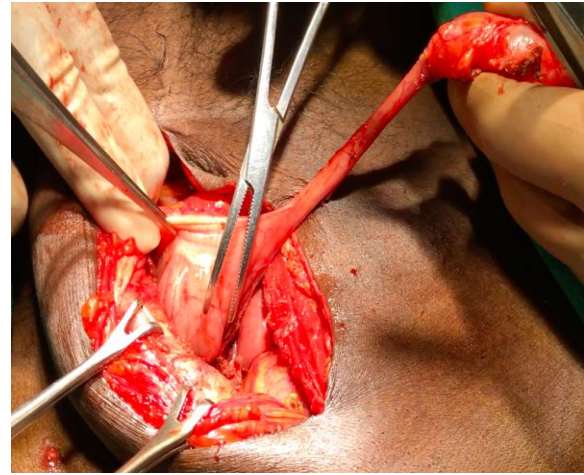
The extent of the surgical resection is based on the suspected pathology. Surgical excision without rupture is of utmost importance. Appendectomy is recommended for simple Mucocele or for cystadenoma. Frozen section of the base of the appendix has been recommended to rule out the presence of a cystadenocarcinoma involvement.<sup>[10,11]</sup> Whenever there is doubt, caecal resection or right hemicolectomy is advised. All patients should have complete exploration of the abdomen regardless of the approach used. Surgical resection for benign Mucocele of the appendix, mucosal hyperplasia and mucinous cystadenoma provides a uniformly good outcome with 5-year survival rates of 90–100% reported. Five-year survival rates fall to 25% in cases with peritoneal involvement or Pseudomyxoma peritonei.<sup>[12]</sup> Recent reports favour the use of special laparoscopic approach by Gauze technique.



CT Scan Showing a mass close to anterior abdominal wall.



Coronal Section CT Scan abdomen



Cystic Tumor at the tip of the appendix. Mucinous cystadenoma of Appendix.

### CONCLUSION

Cystadenoma is rarely considered as the diagnosis prior to elective surgery.

Imaging is usually helpful in small number of patients. Surgical resection of the cystadenoma without rupture is of paramount importance, irrespective of technique. Recent reports favour Laparoscopic approach with a special gauze technique.

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