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MUCINOUS CYSTADENOCARCINOMA OF THE APPENDIX: A CASE REPORT

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ABSTRACT
Appendiceal carcinomas are rare tumors constituting 1% of all colorectal malignancies. In this case report, we present a 57-year-old male patient, who presented with the complaint of a lump in his abdomen, with detection of an intra-abdominal mass in his investigations, and diagnosed as mucinous cystadenocarcinoma localized in the appendix in the pathological examination.

INTRODUCTION

Appendiceal tumors are rarely seen tumors in the community. Malignant tumor is determined in 1.35% of post-appendectomy pathological specimens [1]. Adenocarcinomas constitute 0,08% of these tumors. Approximately 0,001%-0,2% of adenocarcinomas of the gastrointestinal system are of appendix origin [2]. Adenocarcinomas constitute 6% of appendiceal tumors.

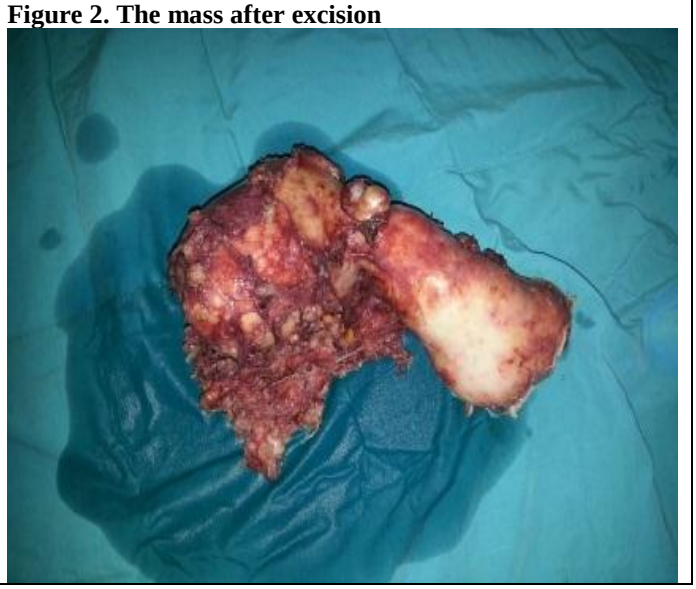
Appendix adenocarcinomas have 2 histological types: mucinous cystadenocarcinoma and colonic-type adenocarcinoma. Approximately 40% of appendix adenocarcinomas are mucin-secreting mucinous adenocarcinomas [3].There is no specific sign of appendix carcinomas. The patients generally present with abdominal pain and a lump in the abdomen. The adenocarcinoma is usually diagnosed per-operatively or with the pathological examination of the excised specimen.

CASE REPORT

A 57-year-old male patient presented to the general surgery outpatient clinic with the complaints of a lump and pain in the abdomen. His history revealed chronic renal disease, diabetes mellitus and hypertension. The physical examination showed minimal abdominal distention and tenderness in the right lower quadrant. A massive lesion with irregular borders extending to the median line from the right lower quadrant was palpated. The abdominal CT detected an irregularly bordered massive lesion between the peri-cecal area and the median line in the abdomen. The operation was planned with a pre-diagnosis of intra-abdominal mass. Laparotomy was performed with a midline incision. Exploration showed a mass lesion with irregular borders of approximately 25*10 cm in dimensions, starting from the right lower quadrant extending to the abdominal midline. The mass was determined to be of appendix origin (Figure 1). The cecum and the other colon segments were healthy. Due to the fact that the mass was of appendix origin and the neighboring intestinal segments were healthy, appendectomy and total mass excision were performed, with the second operation to be planned depending on the pathology result (Figure 2). The patient was discharged with full recovery, and placed under clinical follow-up, with the pathology result of Grade 2 mucinous cystadenocarcinoma.

Figure 1. The relationship of the mass with the appendix

Figure 2. The mass after excision



DISCUSSION

Appendiceal tumors can be divided into histological subgroups such as mucinous adenocarcinoma, colonic-type adenocarcinoma, signet ring cell carcinoma, goblet cell carcinoid/adenocarcinoid tumor, well-differentiated endocrine tumor, and well or poorly differentiated endocrine carcinomas. The endocrine tumors of the appendix (carcinoid tumors) make up 85% of epithelial neoplasias, followed by mucinous adenocarcinoma, colonic-type adenocarcinoma and adenocarcinoid tumors [4-6].

The mean age at the diagnosis of appendix adenocarcinomas is 56 (51-60), with a slight male dominance. Our case was consistent with the literature with regard to age and gender. In the literature, it has been reported that the majority of the cases present with a clinical manifestation of acute appendicitis or an abdominal mass. It is very rare to diagnose the patients before surgery and diagnosis is not possible until the disease is in its advanced stage in the majority of the cases [7,8]. It is important to diagnose the mucinous neoplasms of the appendix preoperatively, with regard to the surgical procedure that will be performed [9]. The approach to appendix adenocarcinoma should be the same as colon carcinoma in any other localization, because its potential for malignancy and the lymphatic invasion form is the same [2,3,10]. The recommended treatment in per-operatively diagnosed tumors is right hemicolectomy [11]. The general opinion on the cases that are diagnosed postoperatively is to perform right hemicolectomy with a second operation. This procedure is mandatory for colonic-type adenocarcinomas. The cystadenocarcinomas with their better prognosis can be followed up after the appendectomy [11,12].

In our case, we thought that the lesion is a tumor; however, since we did not know the definite pathology, total mass excision with appendectomy was performed. Follow-up of the patient was planned after the pathology revealed appendix-limited mucinous cystadenocarcinoma.

CONCLUSION

As a result, appendix mucinous cystadeno carcinoma is a rare appendix neoplasia. The patients usually present with manifestations of acute appendicitis or with the complaint of an abdominal lump. The diagnosis is usually made with the histopathological examination of the excised mass. The treatment may be right hemicolectomy, or appendectomy and total excision of the mass with clinical follow-up of the patient in appendix-limited cases.

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