Case Report

Mucinous Appendix Cystadenocarcinoma, Diagnosed Through Bladder-Transurethral Resection

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Abstract

A 72 year-old woman with episodes of haematuria, mild abdominal pain of months of evolution, in the abdominal exploration, we found a mobile and painless mass in the lower right quadrant. A tumor-like lesion was observed during cystoscopy and a transurethral resection was performed. An abdominal and pelvic CT-scan showed thickening of the bladder, and a tube-like image extended from the bladder dome to the cecum. The biopsy reported an adenocarcinoma with intestinal metaplasia and dysplasia, with infiltration of the muscularis propria of the bladder. Urinary cytologies and colonoscopy were negative. A right hemicolectomy with partial cystectomy was performed by laparoscopy. The anatopathological report suggested Mucinous Apendicular Cystadenocarcinoma with peritoneal and bladder affectionation.

ABBREVIATIONS

B-TUR: A Transurethral Resection of the Bladder (B-TUR)

INTRODUCTION

Generally, appendix tumors are unusual and fortuitously found. This incidence is increasing at the present time thanks to recent progress in diagnostic techniques and laparoscopy. When an appendicular tumor-like lesion is found, it’s necessary to make an exhaustive review of the abdominal cavity, searching for another concomitant intra abdominal neoplasm. Standard treatment is right-hemicolectomy [1-8] followed by chemotherapy in case of intra abdominal metastases.

CASE PRESENTATION

We present the case of a 72 year-old woman with episodes of haematuria, dysuria and mild abdominal pain of months of evolution that ceased spontaneously. In the abdominal exploration, we found a mobile and painless mass in the lower right quadrant.

Urinary cytologies were negative and a 3 to 4 centimeter tumor-like lesion was observed during cystoscopy. A transurethral resection of the bladder (B-TUR) tumor was performed. An abdominal and pelvic CT-scan showed thickening of the right posterior-lateral wall of the bladder with peripheral swelling, and a tube-like image extended from the bladder dome to the cecum with no separation tissue, suggesting perforating appendix pathology. Biopsy reported a moderately undifferentiated adenocarcinoma with mixed pattern that infiltrated thick fragments of the bladder muscularis propria (pT2b) with intestinal metaplasia and dysplasia which casted doubt between a possible urological origin with extravesical extension, or in according with B-TUR findings and the colonic pattern of the biopsy results, an intestinal tumor affecting the bladder. A colonoscopy was practiced and only sigma diverticula are informed.

An exploratory laparoscopy was performed, showing a solid tumor at the appendix tip that infiltrated bladder’s dome, and anterior wall. A right hemicolectomy and a partial cystectomy were practiced. The patient was discharged after 10 days. In the anatopathological report suggested Mucinous Apendicular Cystadenocarcinoma with peritoneal and bladder affectionation; not finding any pathological lymph nodes (pT4bN0M0).
CONCLUSION

Appendix tumors are infrequent and generally accidentally discovered. They account for less than 0.5% of gastrointestinal neoplasms [1-3]. Appendix mucinous cystadenocarcinoma is extremely rare, with a general incidence of 0.01-0.2% [4]. Nowadays this incidence is increasing thanks to recent advances in diagnostic techniques and laparoscopy [6].

Diagnose is generally made upon histopathological examination. There are no specific symptoms. Usually its finding is casual during imaging testing where an abdominal mass is described. Nearly 15-20% of the cases associate another gastrointestinal malignancy [7].

Prognosis is given by the degree of wall extension and by the presence of malignant adenopathy or metastases. It propagates through local, lymphatic and vascular invasion. Treatment is controversial, but standard treatment is right-hemicolectomy [1,3,7,8] followed by chemotherapy in case of intraabdominal metastases. Hesketh informed a 5-year survival rate of 20% for appendicectomy, and 63% for right-hemicolectomy [9-10].

DISCUSSION

In general terms, appendix tumors are rare and accidentally detected. They account for less than 0.5% of gastrointestinal neoplasms, 1% of colorectal malignancies, and less than 3% of appendicectomies [1-5].

These are classified in five sub-types: Adenocarcinomas (colonic, mucinous and Signet-Ring cell types) and Carcinoids. Appendix mucinous cystadenocarcinoma is extremely rare, with a general incidence of 0.01-0.2% [4]. Nowadays this incidence is increasing thanks to recent advances in diagnostic techniques (CT, colonoscopy…) and laparoscopy [6]. It is more frequent in men (4:1) and the incidence increases with age, being the 5th and 6th decades the main moment for its apparition [7], unlike carcinoid types which affect mostly young women.

Due to its infrequency, appendix mucinous cystadenocarcinoma is rarely suspected prior to or during surgery [1-7]. Diagnose is generally made upon histopathological examination [8]. There are no specific symptoms. Usually its finding is casual during imaging testing where an abdominal mass is described, or maybe an increase of abdominal perimeter due to peritoneal pseudomixoma [1]. In less than one third of the cases, an acute abdominal syndrome is observed, simulating appendicitis, or a mass in lower-right quadrant and intestinal occlusion depending on the tumoral extension. Even more rare forms of presentation include: intestinal invagination in adults, Krukenberg tumor secondary to ovary metastase, epididimitis in case of metastase to the spermatic cord or testicles, simulation of a primary bladder cancer as in our case [9], a pelvic mass that causes increased urinary frequency, fever and hydronephrosis, Chron’s disease, vaginal bleeding, anemia [8]. Nearly 15-20% of the cases associate another gastrointestinal malignancy [7].

Prognosis is given by the degree of wall extension and by the presence of malignant adenopathy or metastases. Appendix mucinous cystadenocarcinoma, like colonic cystadenocarcinoma, propagates through local, lymphatic and vascular invasion. The most frequent metastatic location is peritoneum, followed by lymph nodes, liver, ovaries, abdominal wall and lungs [8].

Treatment for this type of adenocarcinoma is controversial. Appendicectomy has been suggested in lesions that are confined to the mucosa, but standard treatment is right-hemicolecotomy [1,3,7,8] followed by chemotherapy in case of intraabdominal metastases.

 Patients who undergo hemicolecotomy, have better prognosis than those appendicectomized. Hesketh informed a 5-year survival predictor [6], being the Carcinoid type the one with better survival rates.
survival rate of 20% for appendicectomy, and 63% for right-hemicolectomy [8-10].

When an appendicular tumor-like lesion is found, it’s necessary to make an exhaustive review of the abdominal cavity, searching for another concomitant intra abdominal neoplasm, and due to its rareness, it’s highly recommended the histopathological study of any appendicular tumoration.

REFERENCES


