CASE REPORT

Tubular Adenoma of the Appendix - A Case Report

SYED ASGHAR NAQI, IMRAN ASLAM, SAJID MAHMOOD

ABSTRACT

The case describes a 70 year old female who was referred from medical department with complaints of abdominal pain vomiting and loose motions for seven weeks. Her colonoscopy had revealed irregular growths around appendicular stump. Biopsy revealed dysplastic cells. Other investigations were not of that much help. These included barium studies, CT scan. Limited right hemicolectomy was performed. Biopsy revealed tubular adenoma, which is amongst the rarer of the adenomas of the appendix.
Key words: Appendix, adenoma, tubular, hemicolectomy, cecum, ascending colon

INTRODUCTION

Adenomas can also appear in the appendix. The condition is extremely rare, and most physicians will never encounter an actual case, but they do happen. The most common version is called cystadenoma. They are usually discovered in the course of examination of the tissue following an appendectomy. If the appendix has ruptured and a tumor is present, this presents challenges, especially if malignant cells have formed and thus spread to the abdomen. Appendicular adenomas are a rare finding. Tubular adenomas are even rarer. No such case has been reported in the literature so far.

Adenoma: An **adenoma** is a benign tumor of glandular origin. Adenomas can grow from many organs including the colon, adrenal glands, pituitary gland, thyroid, prostate, etc. Although these growths are benign, over time they may progress to become malignant, at which point they are called adenocarcinomas. Even while benign, they have the potential to cause serious health complications by compressing other structures (mass effect) and by producing large amounts of hormones in an unregulated, non-feedback-dependent manner (paraneoplastic syndrome).

Histopathology: Adenoma is a benign tumor of glandular tissue, such as the mucosa of stomach, small intestine, and colon, in which tumor cells form glands or glandlike structures. In hollow organs (digestive tract), the adenoma grows into the lumen - adenomatous polyp or polypoid adenoma. Depending on the type of the insertion base, adenoma may be pedunculated (lobular head with a long slender stalk) or sessile (broad base).

Department of Surgery, King Edward Medical University/Mayo Hospital, Lahore
Correspondence to Dr. Syed Asghar Naqi, Associate Professor Email: asgharnaqi@hotmail.com

The adenomatous proliferation is characterized by different degrees of cell dysplasia (atypia or loss of normal differentiation of epithelium) irregular cells with hyperchromatic nuclei, (pseudo)stratified nuclei, nucleolus, decreased mucosecretion, and mitosis. The architecture may be tubular, villous, or tubulo-villous. Basement membrane and muscularis mucosae are intact.

CASE REPORT

Safia bibi, a 70 year old female presented in medical OPD with complaints of abdominal pain, loose motions and vomiting for two months. Colonoscopy revealed an appendicular tumor. Biopsy showed mucinous neoplasm with low grade dysplasia. Endoscopic findings were suggestive of carcinoid tumor.

Patient was operated on 13-02-12. Operative findings included an enlarged appendix, there were however no significant involvement of regional lymph nodes. Limited right hemicolectomy was performed and specimen submitted for histopathology.

There were multiple mucinous lesions in the appendix located at a distance of 8 cm from colonic resection margin and 14.5 cm from ileal resection margin. Histopathology revealed a tubular adenoma of appendix about 7.5 cm. small and large bowel tissues were unremarkable. There were also 15 reactive lymph nodes.

Adenomas can also appear in the appendix. The condition is extremely rare, and most physicians will never encounter an actual case, but they do happen. The most common version is called cystadenoma. They are usually discovered in the course of examination of the tissue following an appendectomy. If the appendix has ruptured and a tumor is present, this presents challenges, especially if malignant cells have formed and thus spread to the abdomen.

Appendicular adenomas are a rare finding. Tubular adenomas are even rarer. No such case has been reported in the literature so far.

DISCUSSION

Tumors of the appendix are infrequent, and when they are found, it is almost always during a routine appendectomy. In the classic study of 71,000 specimens taken at appendectomy, Collins found 958 malignant and 3,271 benign tumors, with an overall incidence of 4.6% for benign tumors and 1.35% for the malignant tumors. Another large series reported a total of 8,699 appendectomies yielding 101 total tumors and 60 malignant neoplasms, for an incidence of 1.2% overall and 0.7% for malignant tumors.

Benign tumors of the appendix consist of leiomyomas, neuromas, and lipomas. Malignant tumors of the appendix include carcinoids, mucoceles, and adenocarcinomas. The original classification of these tumors was that of Uihlein and McDonald in 1943, and this classification is still used, but with modifications.Despite 50 years of use of this system of classification, some still consider the malignant mucocele and adenocarcinoma to be histologically identical and argue that they should be regarded as the same process. Despite this microscopic similarity, however, the natural histories of the two tumors are distinct and most consider them different disease processes. In the series by Collins, the carcinoids made up 51% of the malignant tumors found, mucoceles accounted for 32%, and adeno-carcinomas were 6%. The remainder consisted of a large number of rare tumors, including sarcomas. A complex tumor bearing some features of carcinoid and some of adenocarcinoma, but distinct from both, exists. For this lesion, the term adenocarcinoid has been coined

REFERENCES

1. Erik Barquht MD, Michael ZinnerMD, Neoplasms of the small intestine, vermiform appendix, and peritoneum. Cancer medicine, chapter 102,6th edition.2003
2. Gonzalez-Moreno S, Shmookler B M, Sugarbaker P H. Appendiceal mucocele: contraindication to laparoscopic appendectomy. Surg Endosc. 1998;12:1177. 48.
3. Masson P. Carcinoids (argentaffin-cell tumors) and nerve hyperplasia of appendicular mucosa. Am J Pathol. 1928;4:181. 58.
4. Collins D C. 71,000 human appendix specimens. A final report summarizing forty years' study. Am J Proctol. 1963;14:365.
5. Schmutzer K J, Bayar M, Zaki A E, Regan J F, Poletti J B. Tumors of the appendix. Dis Colon Rectum. 1975;18:324.
6. Moertel C G, Dockerty M B, Judd E S. Carcinoid tumors of the vermiform appendix. Cancer. 1968;21:270.
7. Higa E, Rosai J, Pizzimbono C A, Wise L. Mucosal hyperplasia, mucinous cystadenoma, and mucinous cystadenocarcinoma of the appendix: a re-evaluation of appendiceal "mucocele. Cancer. 1973;32:1525.
8. Aho A J, Heinonen R, Lauren P. Benign and malignant mucocele of the appendix. Acta Chir Scand. 1973;139:392.
9. Edmonds P, Merino M J, LiVolsi V A, Duray P H. Adenocarcinoid (mucinous carcinoid) of the appendix. Gastroenterology. 1984;86:302.
10. Jones R A, MacFarlane A. Carcinomas and carcinoid tumors of the appendix in a district general hospital. J Clin Pathol. 1976;29:687.
11. Horgan J G, Chow P P, Richter J O, Rosenfield A T, Taylor K J. CT and sonography in the recognition of mucocele of the appendix. AJR Am J Roentgenol. 1984;143:959.
12. Aranha G V, Reyes C V. Primary epithelial tumors of the appendix and a reappraisal of the appendiceal "mucocele. Dis Colon Rectum. 1979;22:472.