

Synchronous Adenocarcinoma of Rectosigmoid and Perianal Fistula: Report of a Case

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Citation

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Abstract

Herein we report a rare case of rectosigmoid adenocarcinoma with synchronous seeding of perianal fistula. A 70 year old male presented with frequent bowel motions and anal discharge. One year prior to this presentation, he developed perianal abscess and fistula. Biopsies of both rectosigmoid mass and perianal fistula were obtained during colonoscopy revealing adenocarcinoma. Abdominoperineal resection was performed and revealed primary adenocarcinoma of rectosigmoid with seeding of perianal fistula (TNM: T3 N0 M0). In both lesions, the tumor cells were immunoreactive for CK20 and TP53, and negative for CK7. This is a rare case of primary adenocarcinoma of rectosigmoid with synchronous involvement of perianal fistula.

INTRODUCTION

Exfoliated cells from colorectal cancers can implant staple line, scar, anal mucosa and

anal fistula.¹ Primary adenocarcinoma of anal canal and anal fistula is rare. Sumikoshi, Rosser, Skir, McIntyre and Rundle established the following criteria to diagnose primary cancer of anal fistula:²

- 1- Suffering from anal fistula for > 10 years.
- 2- Mucous secretion.
- 3- Stoma aperture in the anal canal and anus crypt.
- 4- No tumor at oral side of an anal fistula.

Implantation of the tumor cells, synchronously or metachronously can be diagnosed if

there is oral sided rectal or colonic tumor and if not all these five criteria are present. It is also known that implantation of malignant cells into a benign anal lesion was also

described during colorectal cancer surgery, colonoscopy and anal biopsy site.³⁻¹⁰

CASE REPORT

A 70 year old hypertensive male patient presented with frequent bowel motions associated with tenesmus, mucoid anal discharge and anal feeling of incomplete emptying. He

lost 25 Kgs(kilograms)over 3 months. One year prior to his presentation he was diagnosed to have perianal abscess. It was incised and drained under general anesthesia. He continued to have anal discharge and discharge at the site of abscess. Colonoscopy was performed which revealed a fungating friable mass obstructing about 75 % of the lumen and involving rectosigmoid and perianal fistula. Biopsies from the rectosigmoid mass and the perianal fistula were obtained and sent for histopathology. Both showed moderately differentiated adenocarcinoma.

Immunohistochemical studies were not done. Two days later, abdominoperineal resection was performed. Grossly, the tumor was measuring 10.2 x 9.9 x 3.3 cm which lied 8 cm from the dentate line and 2.5 cm above the peritoneal reflection (Figure. 1). Perianal fistula was 9.5 cm from the rectosigmoid mass and 1.5 cm distal to the dentate line. A grayish soft tissue was found within fistula tract. Sections of both lesions revealed adenocarcinoma with similar morphology. Tumor cells from both lesions were immunoreactive for CK20 and TP53 (Figure. 2), and negative for CK7. TNM stage was T3 N0 M0 (Astler Collier stage: B2).

The patient was seen 6 months later. There was no evidence of relapse or metastasis. We concluded that our patient had a primary adenocarcinoma of rectosigmoid with seeding of perianal fistula.

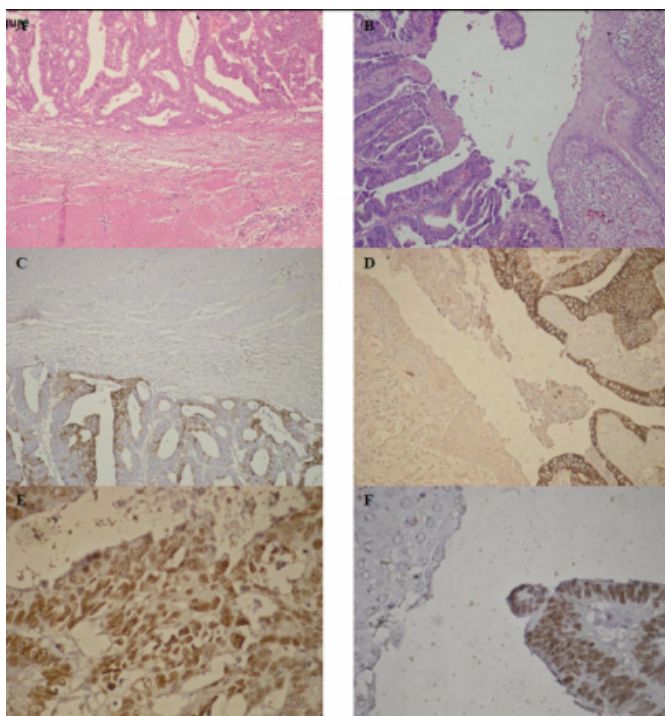
Figure 1

Figure 1. Gross photography; abdominoperineal resection specimen showing a rectosigmoid mass (left) and anal fistula (right).



Figure 2

Figure 2. Micrographs and positive immunohistochemical stains for primary rectosigmoid adenocarcinoma (A; H&E, C; CK20, E; TP53), and adenocarcinoma involving perianal fistula (B; H&E, D; CK20, F; p53).



DISCUSSION

According to Sumikoshi et al. criteria, our patient had a primary adenocarcinoma of rectosigmoid with seeding of perianal fistula. Implantation of the tumor cells plays a role in the pathogenesis of recurrence at the anastomosis site,

traumatic anal tear and mucosal biopsy site.¹¹ There were 17 previously reported cases of colorectal carcinoma with metastasis into anal fistula.¹¹ The average age was 57.4 years which is lower than our case (70 years). Almost all reported cases were males including this current case and one female. Such significant sex difference is an interesting observation and needs further investigation. The majority of cases including our patient have an advanced stage (modified Duke's stages B and C, 72%). Most tumors were moderately differentiated (67%). Literature reports have shown that immunohistochemical marker especially CK20, CK7 and TP53 can be useful in distinguishing colonic tumors originating from anal glands from metastatic carcinoma. Ramalingam et al. have previously described that anal glands are strongly immunoreactive for antibodies to CK7 but not CK20.¹²

CONCLUSION

We report a case of rectosigmoid adenocarcinoma with synchronous seeding of perianal fistula. It is important to biopsy anal lesion in any patient with colorectal cancer.

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