Case Report

Malacoplakia of rectum

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ABSTRACT

Colorectal malacoplakia with ulcerative colitis is a rare clinical entity. This is a case report of a woman, 35 years of age, who presented with bleeding per rectum, lower abdominal pain and painful defecation for 02 months duration. A tender circumferential mass was found on digital rectal examination and incisional biopsy showed malacoplakia. CT scan revealed rectal mass extending up to rectosigmoid junction; infiltrating the pelvic wall and encasing the right lower ureter, though her CEA level was normal. DJ stenting was done for ureteric obstruction and quinolone therapy was instituted. Despite this, surgical debulking (abdominoperineal resection) was carried out for aggravation of her symptoms. The histopathology report revealed it to be a malacoplakia with ulcerative colitis.

KEY WORDS: Malacoplakia; Rectum.

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INTRODUCTION

Malacoplakia is a distinctive rare granulomatous inflammatory disease results from abnormal macrophage response with defective bacterial degradation.[1] It was first described by Michaelis and Gutmann in 1902, characterized by accumulation of Michaelis Gutmann (MG) bodies.[2] These are granular histiocytes with eosinophilic cytoplasm, containing intracytoplasmic, laminated, calcified inclusion bodies.[3]

It frequently involves the urinary tract, gastrointestinal tract being the second most common site.[4] However, it has been reported in other locations including pancreas, trachea, lymph nodes, skin, respiratory tract, adrenal gland, vagina and brain.[5-9] Colo-rectal malacoplakia is usually associated with adenocarcinoma.[3,5,10] Few cases have been reported in literature associated with inflammatory bowel disease.[11] We describe a case of rectal malacoplakia with co-existent ulcerative colitis.

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CASE REPORT

A 35-year old female with no co-morbids presented in outpatient department with complaints of painful defecation, bleeding per rectum and lower abdominal pain for 02 months period. She had history of altered bowel habits and weight loss for the past 08 months and was being treated for recurrent urinary tract infection. On examination, she was anemic with no remarkable abdominal findings. Digital rectal examination revealed tender circumferential mass 4cm from anal verge which was bleed to touch.

Her investigation showed hemoglobin of 8.2 gm/dl, ESR-114 mm/hour and HBsAg-reactive. Stool DR revealed 25-30 pus cells and 20-25 RBCs. Furthermore, CEA level was found to be normal. Colonoscopy was then performed but failed to

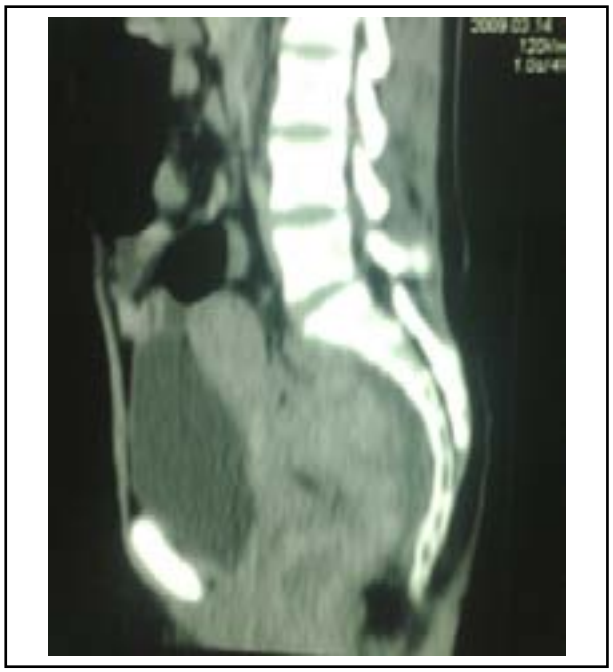

Fig.1: CT scan showing mass extensively involving the pelvis.

negotiate beyond the mass and biopsy was taken which turned out to be rectal malacoplakia (not associated with tumor or inflammatory bowel disease). Meanwhile, ultrasound abdomen was done which showed mild hydronephrosis of right kidney. Contrast CT revealed rectal mass extending up to rectosigmoid region obscuring the lumen with loss of fat planes; infiltrating the pelvic wall, anteriorly abutting the base of bladder and encasing the right lower ureter resulting in right hydroureter and hydronephrosis. Multiple enlarged lymph nodes were also detected (Fig.1). To relieve upper urinary retention, DJ stenting was performed and patient was kept on ciprofloxacin and vitamin C therapy.

Despite the medical management, her symptoms aggravated and she underwent exploratory celiotomy for surgical debulking of disease. On exploration, the mass was found to be strongly infiltrated to the pelvis. Abdominoperineal resection of rectum was performed along with debulking of pelvic mass (Fig.2).

The histopathology report of excised specimen revealed malacoplakia (characterized by aggregates of histiocytes) associated with acute and chronic inflammatory cells in lamina propria with crypt abscesses. Several of these histiocytes contained intracytoplasmic Michaelis-Gutmann bodies, which were confirmed immunohistochemically with CD 68 marker.

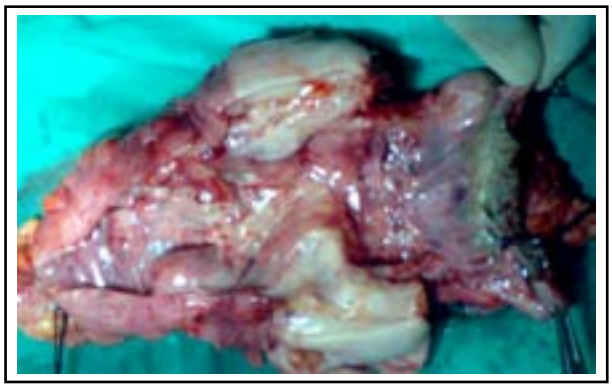

Fig.2: Resected specimen of rectum and anal canal.

Postoperatively, patient was kept on ciprofloxacin, vitamin C and salazopyrin regime. On 03 months follow-up, colonoscopy was done to assess the extent of ulcerative colitis. The rest of bowel was found to be normal. Contrast CT scan revealed minimal residual disease in pelvis and patient is still on quinolone therapy.

DISCUSSION

Colo-rectal malacoplakia simulate tumors and may result in diagnostic difficulties. To best of our knowledge, 95 cases of colonic malacoplakia have been published since 1965. The analysis of these cases revealed that most of them occurred in conjunction with malignancy.[12] However; it is also associated with non-tumoral conditions like inflammatory bowel disease, immunosuppressive therapy and infectious diseases.[13] Our case was also coexistent with ulcerative colitis.

Clinically, colo-rectal malacoplakia usually present with bleeding P/R, altered bowel habits and colicky abdominal pain. Per rectal examination reveals mass in case of rectal variety. Biopsy of lesion reveals pathognomonic Michaelis Gutmann (MG) bodies on light miroscopy[3] and CD 68 positive on immunohistochemistry,[14] but does not frequently demonstrate tumoral and non-tumoral association as previously mentioned by Cipolletta and colleagues in their series.[12] Hence, surgical resection is required to confirm its association with coexisting disease. In this case, preoperative biopsy showed malacoplakia but resected specimen confirmed its association with ulcerative colitis. Moreover, immunohistochemistry revealed cells positive with CD 68.

Multimodality treatment is observed in literature which includes medical management, surgery and radiotherapy. Treatment varies according to the extent of the disease and condition of patient.

Medical treatment is the first line of management. Yousef M[15] mentioned the curative role of ciprofloxacin in his study. Other drugs which have a role in malacoplakia include rifampacin, ascorbic acid, bethanicol and trimethoprin-sulfamethoxazole.[16] However, in cases where malacoplakia is extensive or associated with tumor; surgical debulking followed by ciprofloxacin for residual disease is preferred as previously described by Radin and associates in their case report.[1] In our patient, as the rectal malacoplakia was extensive; infiltrating the pelvis and lymph nodes also, surgical debulking was performed and patient was kept on ciprofloxacin and vitamin C for residual disease as done previously by Suzuki et al.[10]

CONCLUSION

Malacoplakia of rectum is a rare disease, malignant transformation of which has not been reported yet. Though it may mimic malignancy or coexist with tumor and other diseases like inflammatory bowel disease, an enhanced awareness is necessary for its optimal management. Diagnosis is based on histopathology. Nevertheless, ciprofloxacin is effective in treating this disorder, surgical debulking is required in extensive cases.

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