

## Rectosigmoid Adenocarcinoma That is Synchronous with an Anal Fistula (Case Report) in Saudi Arabia

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### ABSTRACT

Rectosigmoid mucinous adenocarcinoma that is Synchronous with an anal fistula is a very rare condition thus its diagnosis and management are challenging. Here, we showed the diagnosis and management of a single case for a 57-year-old Saudi male presented with low rectal mass and gluteal abscess and a history of recurrent perianal abscesses that was managed as benign tumor and without a family history of neoplasms of re colorectal parts. After reviewing the literature concerning the aetiopathogenesis of this case and the suggested treatment. The clinical examination showed a perianal fistula and a digital rectal examination was conducted after incision and drainage of the right gluteal abscess then rigid sigmoidoscopy was performed and biopsy was collected showing invasive moderately differentiated adenocarcinoma. The decision was to avoid radiation preoperative due to abscess and extensive perianal disease and a treatment plan was initiated and the patient was followed up with regular CT examination.

**Keywords:** Synchronous, Rectosigmoid adenocarcinoma, anal fistula, KSA.

### INTRODUCTION

Rectosigmoid mucinous adenocarcinoma that is Synchronous with an anal fistula is a very rare condition. Diagnosis of such cases is challenging especially when the presenting complaint assembles a benign chronic lesion of anal fistula. Management of such cases remains controversial. We present a case that has rarely been reported in Arab countries. A chronic anal fistula that presents repeatedly with perianal abscess that later was found to be synchronous with rectosigmoid mucinous adenocarcinoma treated with extralevator abdominoperineal resection <sup>(1)</sup>.

An anal fistula that is persistent and recurrent causes inflammation that can lead to primary cancer, in 0,1% of all anal fistulae cancer will develop <sup>(1, 2)</sup>. This case emphasizes the importance of further investigation of recurrent perianal abscesses and the need for biopsy of anal fistula <sup>(3)</sup>.

### CASE PRESENTATION

A 57-year-old Saudi male known case of diabetes mellitus (DM) type 2 presented to our general hospital for investigation as a case of low rectal mass and gluteal abscess.

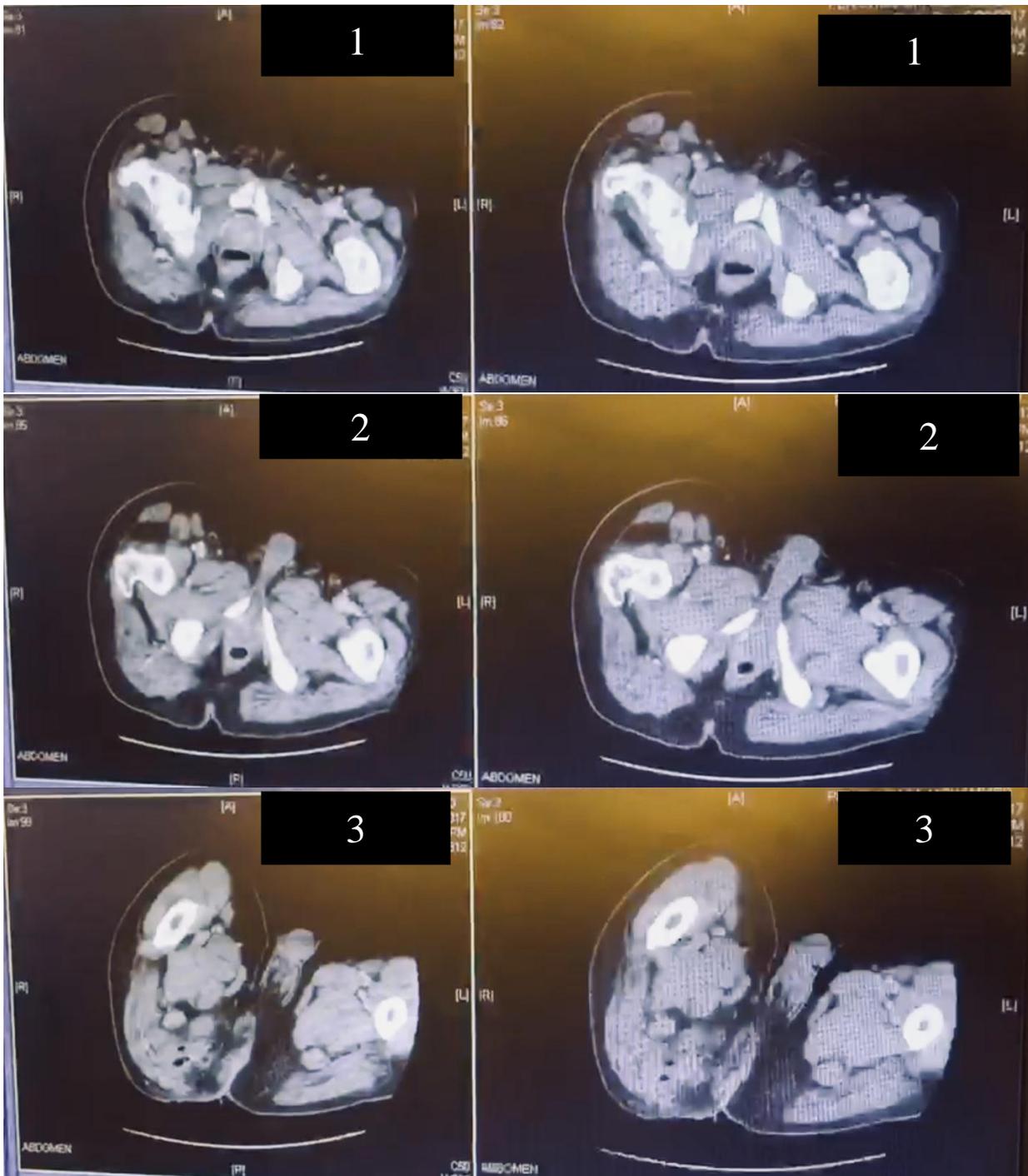
There was no family history of colorectal neoplasia. The patient had recurrent perianal abscess that was treated as a benign condition. Clinical examination

revealed the presence of a longstanding perianal fistula. The patient underwent right gluteal abscess incision and drainage (I&D) with pus 30-50 cc with a big cavity communicating with an external opening in the Rt side near the anal canal. Digital rectal exam (DGE) done in the operating room (OR) showed that there was a mass felt 10cm from anal verge that was soft and mobile. With the use of laparoscopic technique, no peritoneal nodules were found diversion colostomy was done. Rigid sigmoidoscopy was performed and biopsy was taken from the lower rectal mass.

### *Surgical Pathology Diagnosis showed of 1-Low rectal mass, biopsy*

Invasive moderately differentiated adenocarcinoma, right gluteal skin, skin with dermal fibrosis extending to underlying fat associated with mild chronic inflammation and the pathology was negative for malignancy.

After the surgery CT CAP and colonoscopy were ordered. CT reported that there was a Right gluteal region collections with connecting tracts to perianal and perineal regions. No intra-abdominal or pelvic collection. Circumferential wall thickening of the mid rectum representing the previously known tumor thus pelvic MRI is recommended (Fig. 1).



**Figure (1):** MRI showed 1: There are two right gluteal region pockets of collections, the largest measures about 4.5 x4.5cm with multiple gas pockets likely related to recent intervention. There are tracts coursing toward peri-anal and perineal regions on the right side with inflammatory changes but no drainable collection. 2: There is a polypoid mid to upper rectal mass, about 9 cm from the anal verge, measures 6.5. 3: Presacral collection with air bubble measuring (6.4 x 5 x 3 cm = 50 ml) communicating with the perineum with possible tethering of the posterior wall of the urinary bladder.

Colonoscopy was performed later from the stoma reaching the terminal ileum showed that there was a mass lesion about 2\*3 cm, fungating seen in the cecum near to ileocecal valve that was highly suspicious biopsy was, then the scope was passed through anal canal and there was a large fungating semi circumferential mass about 10 cm from anal verge and was biopsied.

**- Pathology after colonoscopy showed**

1. Cecum, mass, biopsy: - Invasive adenocarcinoma, moderately differentiated.
2. Rectum, mass, biopsy: - Several superficial fragments of a moderately differentiated intramucosal adenocarcinoma.

**- MRI staging T2N1M0**

10cm from anal verge right upper mid rectum 5x3.3 cm polypoidal tumor raising from 12-3 o'clock single intensity, suggestive of mucinous adenocarcinoma staging T2 tumor does not exceed the wall N1 (less than three lymph nodes )M0.

So, this patient was discussed at the tumor board at King Khaled university hospital. The decision was to avoid radiation preoperative due to abscess and extensive perianal disease and a treatment plan was initiated.

**DISCUSSION**

Rectosigmoid mucinous adenocarcinoma that is synchronous with an anal fistula that presents as recurrent perianal abscess is a very rare condition. Perianal disease in these patients appears to be the cause of their symptoms. That's why the coexisting carcinoma is missed. Sex prevalence is important as most cases that were reported were male patients except one female. A histological examination should be performed in all cases of long standing fistula and perianal abscess<sup>(3-5)</sup>.

In 1907 Charles Ryall<sup>(5)</sup> was the first to report the phenomenon known as cancer infection which is implantation metastasis of solid cancers<sup>(3,6)</sup>.

In our case, perianal disease was attributed as the cause of the patient's symptoms and the primary carcinoma was missed. Clinicians who treat patients with anal fistulae and recurrent perianal abscesses should refer them to a colorectal

specialist in order to exclude the possibility of primary carcinoma by further investigations.

**CONCLUSION**

The diagnosis of a rectosigmoid mucinous adenocarcinoma that is synchronous with an anal fistula is not easy to establish especially when the colonic tumor is repeatedly treated as a benign condition. We reported a case of a patient that was treated by extralevator abdominoperineal resection. This case emphasizes on further investigating recurrence of anal fistula with abscess and the importance of biopsy in all anal fistulae.

**CONFLICTS OF INTEREST**

The authors declare that they have no competing interests.

**CONSENT**

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. The study was done after approval of ethical board of King Faisal University.

**REFERENCES**

1. **Takahashi R, Ichikawa R, Ito S, Mizukoshi K, Ishiyama S, Sgimoto K et al. (2015):** A case of metastatic carcinoma of anal fistula caused by implantation from rectal cancer. *Surgical case reports*, 1: 123.
2. **Mc AA, Dockerty MB (1949):** Carcinoma developing in chronic draining cutaneous sinuses and fistulas. *Surg Gynecol Obstet.*, 88: 87-96.
3. **Spiridakis KG, Sfakianakis EE, Flamourakis ME, Intzepogazoglou DS, Tsagataki ES, Ximeris NE et al. (2017):** Synchronous mucinous adenocarcinoma of the recto sigmoid revealed by and seeding an anal fistula. (A case report and review of the literature). *Int J Surg Case Rep.*, 37: 48-51.
4. **Benjelloun el B, Aitalalim S, Chbani L, Mellouki I, Mazaz K, Aittaleb K (2012):** Rectosigmoid adenocarcinoma revealed by metastatic anal fistula. The visible part of the iceberg: a report of two cases with literature review. *World J Surg Oncol.*, 10: 209.
5. **Ryall C (1907):** Cancer infection and cancer recurrence: a danger to avoid in cancer operations. *The Lancet*, 170: 1311-1316.
6. **Shinohara T, Hara H, Kato Y, Asano M, Nakazawa Y, Kato T et al. (2001):** Implantation of rectal cancer cells in a fistula in ano: report of a case. *Surgery today*, 31: 1094-1096.