Case Report

Pakistan Journal of Medical and Biological Sciences
https://pjmbs.gcuf.edu.pk/

ANAL CARCINOMA: CASE REPORT

Abid Rashid[1], Sultan Ayaz[2*], Riaz ur Rehman[2], Ejaz Mohiuddin[3]

ABSTRACT

Adenocarcinoma of the anal canal is an infrequent state which may occur in chronic inflammatory conditions such as Crohn's disease, or a chronic fistula-in- ano. In this case, we present the diagnosis and management of a female patient age 75 years, who came with complaints of intermittent prolapse of an anorectal lump for the last 6 months with infrequent bleeding and discharge per rectum. This case was initially assessed with Magnetic Resonance Imaging (MRI), and then the diagnosis of anal carcinoma was confirmed with the help of a biopsy of the anorectal lump. These Biopsies concluded malignant adenocarcinoma of the anal canal. In this case metastases to distant areas were not found. Surgical management is still widely excision of anal carcinomas. Here a case of primary anal adenocarcinoma is presented with a brief discussion exploring diagnostic techniques, treatment options, and prognostic factors.

Key Words: Malignancies, Metastasis, Anal canal carcinoma, Surgery, Prolapse

1 Directorate of Medical Sciences, Government College University, Faisalabad

2 Department of Eastern Medicine, Directorate of Medical Sciences, Government College University,Faisalabad

3 Faculty of Eastern Medicine,Hamdard University Karachi

Corresponding author

Email: ayaz_libra@hotmail.com

INTRODUCTION

The malignancies of anal canal origin are usually squamous cell carcinoma or adenocarcinoma. Anal carcinoma is a rare condition, accounting for only 1% of cancers of the gastrointestinal tract. Among anal cancers, a large majority are histologically squamous cell carcinomas, and only about 10% of cancers in this region are adenocarcinomas (1). These are thought to originate from the columnar epithelial lining of the anal glands. As defined by WHO criteria, anal adenocarcinomas arise from three sites, the rectum, anal glands, and a chronic fistula-in- ano. Adenocarcinomas arising from an anorectal region constitute only about 7% of anal canal carcinomas (2).

The diagnosis of cancer in patients presenting with chronic anal prolapsing mass requires a high index of suspicion. Together with imaging and photographs, we describe our method of diagnosis and management of a patient suffering from anal adenocarcinoma in this case report. The most commonly applied surgical techniques which are applied in anorectal malignancies include wide local excision (WLE) to abdominoperineal resection (APR) along with or without adjuvant radiotherapy (3).

CASE REPORT

The lump started as small red papulae but gradually grew in size. She was indulged in treatment by spiritual means and had never sought prior medical attention for this lesion, and only did so at the current instance as she was experiencing increasing size and peri-anal discomfort. She was not known to have any perianal disease. There was also no family history of malignancy. On examination, the lump was tender, measured about 15x15 cm in size, and was soft to firm in consistency. The digital rectal examination also revealed a large mass in the peri-anal canal region.

To evaluate this mass better, a Magnetic

Resonance Imaging (MRI) of the pelvis was performed. The lesion measured 15x15 cm and appeared hyperintense on T2eweighted imaging with no loco-regional involvement. MRI revealed the involvement of pelvic lymph nodes.

Small-volume inguinal and pelvic lymph nodes were also visualized. The aforementioned mass was identified and biopsied.

Colonoscopy was also performed to evaluate the rectal mucosa and the anal canal mucosawhich showed tubular adenoma with low-grade dysplasia in the transverse colon. Biopsies of the lump were taken externally, and small amounts of haemo-purulent fluid were expressed during thebiopsy.

The biopsy of the anorectal mass demonstrated fragmented portions of squamous mucosa and stroma with glandular neoplasm, ulceration, necrosis, and granulation tissue. The neoplasm was composed of infiltrative glandular structures with colonic-type features (CDX2 and CK20 positive, CK7 negative), leading to a diagnosis of adenocarcinoma with anorectal origin. The biopsy of the sigmoid colon polyp was consistent with a tubule-villous adenoma of low-grade dysplasia.

DISCUSSION

The pathogenesis of a neoplastic lesion from the anal glands is due to secondary change following chronic inflammation resulting in persistent mucosal regeneration (4). This has been implicated following the observation of anal adenocarcinoma arising in patients with chronic local inflammatory states, such as anal fistulas, as well as in inflammatory bowel disease (IBD) (5). Other postulations for the origin of anal adenocarcinoma include the implantation of cancer cells from a more proximal location along the colon or the use of chronic immunosuppression in patients with IBD (6). A meticulous evaluation of the gastrointestinal tract during colonoscopy is therefore important, and all polyps should be biopsied for histological evaluation. The diagnosisof anal adenocarcinoma requires a high index of suspicion to avoid delay in treatment. The absence of any antecedent gastrointestinal tract cancers, as well as a long history of symptoms of the fistula, strongly suggest the presence of cancer arising de novo from a previously benign anal fistula (7). The diagnosis can however only be confirmed on histological biopsy as the differentials include conditions such as tuberculosis, actinomycosis, perianal Paget's disease, as well as lymphogranuloma venereum(8).

Some possible approaches of current treatment include primary surgery with adjuvant chemoradiotherapy (CRT), primary CRT, as well as neoadjuvant CRT with surgery and adjuvant CRT (9). Surgical therapy is the treatment of choice in the absence of any distant metastasis. Several latest research reports recommend that, if it is possible, sphincter-sparing local excision and adjuvant radiation is a well-accepted way of management. and this technique can efficiently prevent loco-regional disease which will also significantly avoid the occurrence of functional morbidity in patients with ano-rectal carcinomas (10).

CONCLUSION

We reported a patient with a chronic, progressive anorectal lump which was confirmed to be anal adenocarcinoma by using the latest diagnostic tools such as MRI, colonoscopy, and excision biopsy. Current literature suggests that when the disease is potentially curative, radical surgery with either pre- or post-surgery chemo radiotherapy should be attempted to achieve the best overall survival. Surgery is the primary treatment which consists of local excision versus radical resection and the need for adjuvant therapy. Due to the low incidence of anal wall adenocarcinoma, surgical excision compared with chemo and radiotherapy carries greater prognostic outcomes.

REFERENCES

1. De Vuyst H, Clifford GM, Nascimento MC, Madeleine MM, Franceschi S. Prevalence and type distribution of human papillomavirus in carcinoma and intraepithelial neoplasia of the vulva, vagina and anus: A metaanalysis.International Journal of Cancer. 2009;124(7):1626-36.

2. Gabriel WB. Squamous-cell carcinoma of the anus and anal canal: an analysis of 55 cases.

3. Che X, Zhao DB, Wu YK, Wang CF, Cai JQ, Shao YF, Zhao P. Anorectal malignant melanomas: retrospective experience with surgical management. World Journal of Gastroenterology. 2011;17(4):534-536.

4. Chan DK, Chong CS, Tan KK. Case report of an anal adenocarcinoma arising from a perineal lump. Annals of Medicine and Surgery. 2016;6:23-5.

5. Cosnes J, Gower–Rousseau C, Seksik P, Cortot A. Epidemiology and natural history of inflammatory bowel diseases. Gastroenterology. 2011;140(6):1785-94.

6. Avital S, Sands DR, Rosenthal R. 8 Laparoscopic Surgery of the Colon. Diseases of the Colon. 2006;18:211.

7. Mokbel K. Concise Notes for Oncology for MRCP and MRCS. Radcliffe Publishing; 2005.

8. Bafford AC, Tran TL. Colorectal Interventions: Benign Anorectal Disease. In Pelvic Floor Dysfunction and Pelvic Surgery in the Elderly 2017 (pp. 387-401). Springer New York.

9. Habr-Gama A, Perez RO, Nadalin W, Sabbaga J, Ribeiro Jr U, e Sousa Jr AH, Campos FG, Kiss DR, Gama-Rodrigues J. Operative versus nonoperative treatment for stage 0 distal rectal cancer following chemoradiation therapy: long-term results. Annals of Surgery. 2004;240(4):711.

10. Benson AB, Bekaii-Saab T, Chan E, Chen YJ, Choti MA, Cooper HS, Engstrom PF, Enzinger PC, Fakih MG, Fuchs CS, Grem JL. Rectal cancer. Journal of the National Comprehensive Cancer Network. 2012;10(12):1528-64.

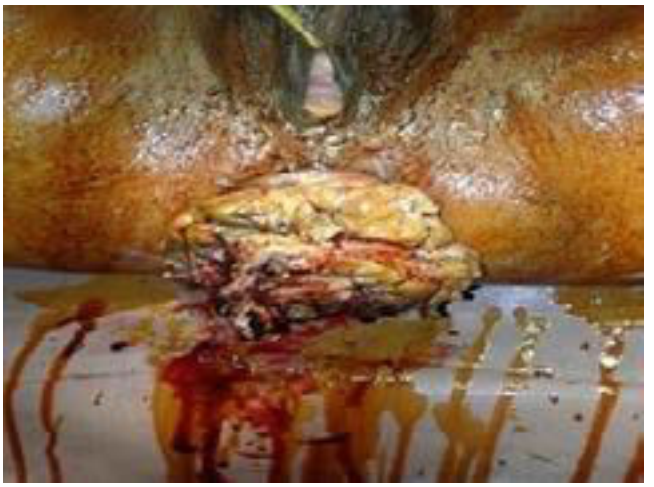

Fig-1

Fig-1

Fig-2

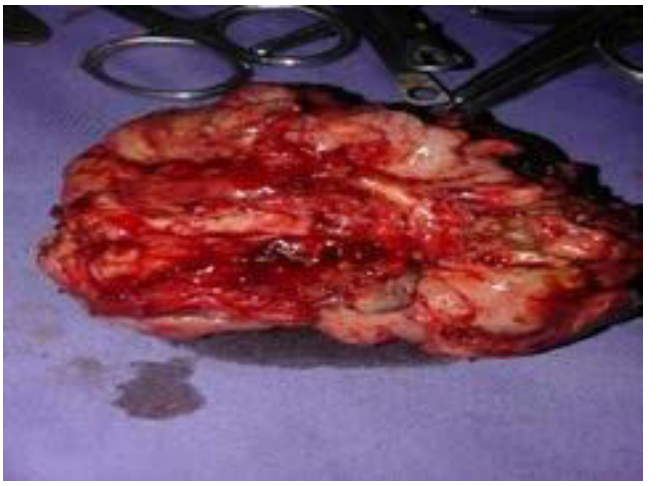

Fig-2