## Colorectal cancer implant in an external hemorrhoidal skin tag

Lampros Liasis, MD, and Harry T. Papaconstantinou, MD

External hemorrhoidal skin tags are generally benign. Colorectal cancer metastases to the squamous epithelium of perianal skin tags without other evidence of disseminated disease is a very rare finding. We present the case of a 61-year-old man with metastasis to an external hemorrhoidal skin tag from a midrectal primary adenocarcinoma. This case report highlights the importance of close examination of the anus during surgical planning for colorectal cancers. Abnormal findings of the perianal skin suggesting an implant or metastatic disease warrant biopsy, as distal spread and seeding can occur. In our patient, this finding appropriately changed surgical management.

xternal hemorrhoidal skin tags are benign and are removed if they cause local problems (irrigation, pruritus, etc.) or for cosmetic reasons. We describe a patient with colon cancer where abnormal findings in an anal skin tag had survival significance.

## CASE REPORT

A 61-year-old man was referred to the colorectal service at Baylor Scott & White Memorial Hospital in Temple, Texas, complaining of anal pain and bleeding. During perianal examination, two unremarkable acutely thrombosed external hemorrhoids were noted. Endoscopic examination of the colon revealed a locally advanced poorly differentiated rectal adenocarcinoma 5 to 7 cm from the anal verge. Endorectal ultrasound revealed a uT3N0Mx tumor. Computed tomography (CT) evaluation of the chest, abdomen, and pelvis was unremarkable for metastatic disease. The patient underwent neoadjuvant chemotherapy and radiation therapy. Radiation therapy was provided using CT-guided three-dimensional conformal therapy with 50 Gy to the tumor bed and 45 Gy to the pelvic lymph nodes. The perineal skin was spared. Two months after completing neoadjuvant therapy, the patient was reevaluated for surgical planning. During anorectal examination, he was noted to have asymptomatic external hemorrhoidal skin tags in the location of the previous thrombosed hemorrhoids. These tags, however, exhibited a hyperemic firm ulcerated mass at the tip (Figure 1a).

Biopsies of the mass on the external tag demonstrated an invasive poorly differentiated adenocarcinoma. Given this result, the patient underwent abdominoperineal resection of the

rectum. The primary cancer in the rectum was 7 cm from the hemorrhoidal implant (Figure 1b). The hemorrhoidal tag had normal squamous epithelium with a focus of invasive poorly differentiated adenocarcinoma (Figure 1c). There was no evidence of lymphovascular invasion or tumor involvement of the hemorrhoidal vascular pedicle. The closest margin to the implant was 3 cm. The patient was discharged with no complications from surgery and underwent adjuvant chemotherapy. At 5-year follow-up, there was no recurrence of the neoplasm.

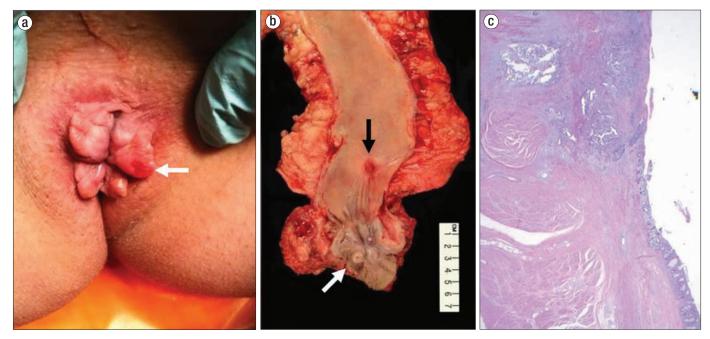
## DISCUSSION

Rectal cancer has been shown to spread distally as far as 5 cm (1). Downstream seeding of colorectal adenocarcinoma is most commonly identified in anastomotic sites (2, 3), biopsy sites (4), and anal fistulas (5-15), as well as in perianal areas with a previous traumatic intervention (16, 17). Literature pertaining to metastatic disease to hemorrhoids is scarce and usually focuses on metastasis to hemorrhoidectomy sites (8, 18-20). Colorectal metastasis to hemorrhoidal sites that were treated with banding or sclerotherapy have been reported (21). Only 3 cases have been reported of colorectal cancer implants to hemorrhoids without previous therapeutic intervention (22, 23). It is especially remarkable that in all 3 case reports, implants were noted during the follow-up period after the operation for primary colorectal adenocarcinoma. Furthermore, all implants involved the internal hemorrhoidal plexus where adenomatous epithelium is normally found. Our case report is the first to describe the downstream colorectal metastasis to an external hemorrhoidal skin tag that was discovered after neoadjuvant therapy and before surgical intervention. This also is the only case of downstream metastasis affecting a nonoperated site of squamous epithelium.

In our patient, repeat examination of the anal canal prior to the operation allowed for diagnosis of the metastasis, which changed the surgical strategy. The patient received the optimal

From the Department of Surgery, Northwick Park Hospital, London North West Healthcare NHS Trust, and Imperial College School of Medicine, London, UK (Liasis); and Department of Surgery, Baylor Scott & White Memorial Hospital, Temple, Texas (Papaconstantinou).

**Corresponding author:** Harry T. Papaconstantinou, MD, Glen E. and Rita K. Roney Professor and Chairman, Department of Surgery, Baylor Scott & White Memorial Hospital, 2401 South 31st Street, Temple, TX 76508 (e-mail: hpapaconstantinou@sw.org).



**Figure 1. (a)** Abnormal external anal skin tag with hyperemic ulcerated tip (white arrow). **(b)** Surgical specimen after abdominoperineal resection. The black arrow shows the site of primary adenocarcinoma of the rectum, and the white arrow shows the adenocarcinoma implant in an external hemorrhoidal skin tag. **(c)** Photomicrograph of normal squamous epithelium of an anal skin tag with a focus of invasive adenocarcinoma (hematoxylin and eosin stain at 10× magnification).

abdominal-perineal resection of the rectum instead of the previously planned low anterior resection. It is important to note that if there was evidence of the tumor implant in the hemorrhoidal tag before neoadjuvant therapy, the field of radiation therapy would have included the perineal skin, inguinal lymph nodes, and ischiorectal fossa. This would be in direct response to the pattern of lymph node drainage exhibited in the distal rectum and anus.

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