Metastatic Lung Carcinoma to the Anus Despite Radiation Therapy for Anal Squamous Cell Carcinoma

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Background

Lung cancer remains the leading cause of cancer related deaths worldwide, with frequent progression to metastatic disease and very poor overall survival. Metastatic spread to the anus and perianal region, however, is an extremely rare phenomenon.

Case Presentation

We present a case of a 69-year-old male, with synchronous primary malignancies including anal squamous cell carcinoma and lung adenocarcinoma, who was found to have primary lung adenocarcinoma metastasis to the anus, despite radiation therapy for primary squamous cell carcinoma of the anus. Given his symptomatic anal lesion and locally advanced disease (Figure 1), he was treated initially with Nigro protocol. He experienced a delay in his follow-up, with significant progression of his lung malignancy (Figure 2). While awaiting chemoradiation for his lung malignancy, he underwent EUA and biopsy for post-treatment evaluation. Pathology of the anal lesion was significant for metastatic adenocarcinoma with lung primary (Figures 3a and 3b).

Imaging

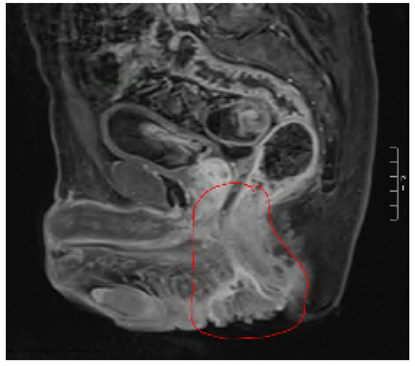


Figure 1



Figure 2

Pathology

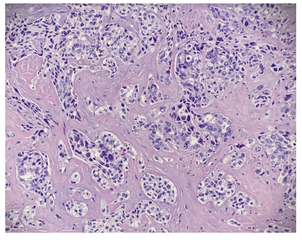


Figure 3a
Metastatic Carcinoma, consistent with Lung Primary.

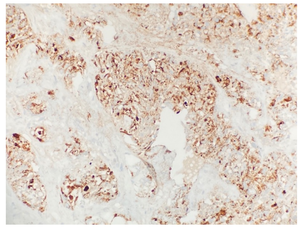


Figure 3b
Metastatic Carcinoma, consistent with Lung Primary. Immunohistochemical stain of perianal ulcer. NapsinA (+)

Results

We used online search engines including Pubmed, Cochrane, and Embase to review available published medical literature. We reviewed cases of primary lung cancer spread to the anus, as well as metastasis after chemoradiation for treatment of anal squamous malignancy. There are thirteen reports of lung cancer metastasis to the anus. We did not find any reports of lung cancer spread to radiation sites after treatment for anal squamous cancer. Unfortunately, the reported survival in these patients was poor, all deaths occurring in less than one year, including our patient. The majority were treated with chemoradiation, as surgical resection for cure was not possible.

Conclusion

This is the first report, to our knowledge, of metastatic lung adenocarcinoma to the anus after prior chemoradiation therapy for anal squamous carcinoma. Metastatic lung cancer to the anus or perianal region is an extremely rare phenomenon with only 13 other reported cases in the literature. Anal pathology including abscesses, fistulas and other post-radiation pathology should be considered as a possible malignant spread of primary tumor.

Scan for more information including references